Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary

accession number.

accession number can be found by searching the old accession number in the UniProt Protein extension .rup) that can no longer be found in the database, the permanent record with the new If you encounter an accession number from an older search run against UniProt (results file Archive database (UniPARC) at:

http://www.pir.uniprot.org/database/archive.shtml

If you have any questions regarding this information or your results, please contact any STIC searcher.

include a copy of this attachment to assist any future Examiners or numbers members of the public who may encounter UniProt temporary accession When submitting sequence search results for scanning into IFW, please



Run

January

9

2006, 15:14:56

; Search (without 1374.564

time 97.008 alignments) Million cel

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protein search, using sw model

Copyright

GenCore (c) 1993

version - 2006

Compugen

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Scoring table: Sequence: Title: Perfect score:

BLOSUM62 Gapop 10.0 ,

Gapext 0.5

US-09-811-367B-1 1023 1 MTDSVIYSMLELPTATQAQN....

Searched

2166443 seqs,

705528306 residues

chosen parameters:

9256

Total number of hits satisfying

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No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, g derived by analysis of the total score distribution.
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ID O43198;
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AC O43198;
DT 01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
DT 01-JUN-1998 (TrEMBLrel. 26, Last annotation update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Mast Cell function—associated antigen.

GN Name=MAFA,
OS Human).

ROW NAME SEQUENCE.

ROW TISSUE=Enzyme digested lung;
RA Lamers M.B., Lamont A.G., Williams D.H.;
RA Lamers M.B., Lamont A.G., Williams D.H.;
RA Lamers M.B., Lamont A.G., Williams D.H.;
RA Lamers M.B.A.C., Lamont A.G., Williams D.H.;
RA Calmers M.B.A.C., Lamont A.G., Williams D.H.;
RA Lamers M.B.A.C., Lamont A.G., Williams D.H.;
RA Calmers M.B., Lamont A.G., Williams D.H.;
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MEDLINE=98438735; PubMed=9765598; DOI=10.1016/S0167-4781(98)00107-9;
Lamers M.B., Lamont A.G., Williams D.H.;
"Human MAFA has alternatively spliced variants.";
Biochim. Biophys. Acta 1399:209-212(1998).
                                                                                                                                                                                                                            Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
PROSTITE; PS50041; C. TYPE LECTIN 2; 1.
SEQUENCE 189 AA; 21079 MW; T5E042AD40B2B4F6 CRC64;
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Q6ZR89_HUMAN
Q9XXB7 CAEEL
Q4RSS5_TETING
Q54V41_DICDI
Q68P15_CENSC
Q64V45_PLABE
Q5NZZ9_AZOSE
E321_ADE07
Q5MDB1_9DIPT
Q9EE95_XYLFA
Q5EY51_ADE07
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Pred. No. 2.7e-89;
; Mismatches 0;
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075613 HUMAN
088713 MOUSE
064335 RAT
062YP3 CHICK
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01800 CAEBR
0777ED
076778 CAEBL
078778 CABBL
078778 CABB

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66.5 60.5

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2: uniprot_trembl:*

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Eur. J. Immunol. 28:4409-4417(1998).
EMBL; AF081675; AAG32200.1; -; mRNA.
EMBL; AF097158; AAD03719.1; -; mRNA.
EMBL; AF097158; AD03719.1; -; mRNA.
HSSP; Q13241; 1B6E.
GO; GO:0004872; F:receptor activity; IEA.
GO; GO:0004872; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
Pfam; PF00059; Lectin C; 1.
SMART; SM00034; CLECT; 1.
PROSITE; PS50041; C TYPE LECTIN 2; 1.
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MEDLINE=99057052; PubMed=9842918;

MEDLINE=99057052; PubMed=9842918;

DOI=10.1002/(SICI)1521-4141(199811)28:11<3755::AID-IMMU3755>3.0.CO;2-3;

Butcher S., Arney K.L., Cook G.P.;

"MAFA-L, an ITIM-containing receptor encoded by the human NK cell gene complex and expressed by basophils and NK cells.";

Bur. J. Immunol. 28:3755-3762(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE.
MEDLINE=99077194; PubMed=9862378;
Hanke T., Corral L., Vance R.E.,
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STRAIN-C.B-17 SCID;

MEDLINE=99077194, PubMed=9862378;

Hanke T., Corral L., Vance R.E., Raulet D.H.;

"2F1 antigen, the mouse homolog of the rat 'mast cell function-
associated antigen', is a lectin-like type II transmembrane receptor
expressed by natural killer cells.";

Eur. J. Immunol. 28:4409-4417(1998).
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10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Mast cell function-associated antigen 2F1 (Killer cell lectin-like receptor G1) (MAFA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGI; MGI:1355294; Klrg1.
GO; GO:0016021; C:integral to membrane; TAS.
GO; GO:0005529; F:sugar binding; TAS.
GO; GO:0007166; P:cell surface receptor linked
InterPro; IPR001304; Lectin C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. Immunol. 161:6451-6454(1998).

EMBL; AF097357; AAD03718.1; -; mRNA.

EMBL; AF317727; AAK40082.1; -; Genomic_DNA.

EMBL; AJ010751; CAA09342.1; -; mRNA.

HSSP; Q13241; 1B6E.

Ensembl; ENSMUSG0000030114; Mus musculus.
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STRAIN=129/SvevTACfBr; TISSUE=Spleen;
MEDLINE=21115136; PubMed=11220622; DOI=10.1007/s002510000282;
Voehringer D., Kaufmann M., Pircher H.;
                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                  Lectin; Receptor. CHAIN 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00059; Lectin_C; 1. SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=99077501; PubMed=9862665; Blaser C., Kaufmann M., Pircher H.; Blaser C., Kaufmann M., Pircher H.; "Virus-activated ONE T cells and lymphokine-activated NK cells express the mast cell function-associated antigen MAFA, an inhibitory C-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=Klrg1; Synonyms=Mafa, mafa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1998 (TrEMBLrel. 08, 01-AUG-1999 (TrEMBLrel. 11, 10-MAY-2005 (TrEMBLrel. 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE;
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                                                                                        PS50041;
LFGEYLGQDFYWIGLRNIDGWRWEGGFALSL-RILTNSLIQRCGAIHRNGLQASSCEVAL
                                          LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                                             WIDSALASMIET LALOVONDAGE OKSSSSKESC SCINVILLE TITALIT SALTA OMIT
                                                                                                                                                                                     MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
                                                                                                                                                                                                                                                                                                                                                                     188
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                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                     21396 MW;
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                                                                                                                                                                                                                                                                          Score 548.5; DB 2
Pred. No. 4.5e-44;
6; Mismatches 56
                                                                                                                                                                                                                                                                                                                                                                  (MAFA).
876336802EA134F1 CRC64;
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Proc. Natl. Acad. Sci. U.S.A. 92:9397-9401(1995).

EMBL; X97191; CAA65829.1; -; Genomic_DNA.

EMBL; X79812; CAA56208.1; -; mRNA.

EMBL; X97192; CAA65829.1; JOINED; Genomic_DNA.

EMBL; X97193; CAA65829.1; JOINED; Genomic_DNA.

EMBL; X97194; CAA65829.1; JOINED; Genomic_DNA.

EMBL; X97195; CAA65829.1; JOINED; Genomic_DNA.
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Q64335;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
MAFA protein (Mast cell function associated antigen).
Name-Klrgl; Synonyms-MAFA, mafa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=96016176; PubMed=7568140;
Guthmann M.D., Tal M., Pecht I.;
"A secretion inhibitory signal transduction molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bocek Jr P., Guthmann M.D., Pecht I.;
"Analysis of the gene encoding the mast cell function-associated antigen and its alternatively spliced transcripts.";
J. Immunol. 158:3235-3243(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                 PROSITE; PS50041; C TYPE LECTIN 2; 1.
SEQUENCE 188 AA; 21356 MW; 2CC8032D4D020B15 CRC64;
                                                                                                                                                                                                                                                                                                          Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-Sprague Dawley; TISSUE=Testis;
MEDLINE=97240766; PubMed=9120279;
                                                                                                                                                                                                                                                                                                                                        InterPro; IPR001304;
                                                                                                                                                                                                                                                                                                                                                                                 Ensembl; ENSRNOG00000014918; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE
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                         HGVCKKV
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 186
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                                                                                                                                                                                                                         29;
                                                                                                                                                                                                                        Score 525.5; DB 2;
Pred. No. 6.9e-42;
9; Mismatches 57;
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RESULT

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Q6ZYP6_CHICK
ID Q6ZYP6;
AC Q6ZYP6;
AC Q6ZYP6;
DT Q6ZYP6;
DT Q5_JUL_2004 (TrEMBLrel. 27,
DT Q6_JUL_2004 (TREMBLREL. 2004) (TREMBL)
DT DT Q6_JUL_2004 (TREMBLREL. 2004) (TREMBLREL.
RESULT
Q6ZYP3
ID Q6
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Matches 48
              QEZYP3_CHICK PRELIMINARY;
QEZYP3;
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
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Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00034; CLECT; 1.

PROSITE; PS00615; C TYPE LECTIN 1;

PROSITE; PS50041; C TYPE LECTIN 2;

SEQUENCE 188 AA; 20997 MW; 9FD5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AJ634334; CAG25418.1; -; mRNA.
HSSP; Q9H8F0; 1K9J.
GO; GO:0005529; F:sugar binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR002353; AntifreezeII.
InterPro; IPR001304; Lectin_C.
Pfam; PF00059; Lectin_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Characterisation of C-type reveals that the NK Complex
                                                                                                                               CHICK
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                                                                                                                                                                                                                                                                                                                                                         KYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNS-
                                                                                                                                                                                                                           EHAWEWVNRSPL----
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                                                               (TrEMBLrel. 27,
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27.3%;
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                                                                                                                                                                                                                           -SHLFQVQGDGLCAYLGDAGLSSSHCSARRNWVCTKPAL
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                  Last sequence update)
Last annotation update)
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4; Mismatches
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Q9NY25; Q9UKQ0;
10-MAY-2005 (Re)
                                                                                      10-MAY-2005 (Rel. 47, Created)
10-MAY-2005 (Rel. 47, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
C-type lectin domain family 5 member A (C-type lectin superfamily member 5) (Myeloid DAP12-associating lectin) (MDL-1).
Name=CLEC5A; Symonyms=CLECSF5, MDL1;
Homo sapiens (Human).
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PROSITE;
SEQUENCE
                                                                         Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00059; Lectin C; 1.
PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases. EMBL; AJ634337; CAG25421.1; -; mRNA. HSSP; Q9H8F0; 1K9J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rogers S.L., Gobel T.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30; G0:0005529; F:sugar Dinuing, -
30; G0:0005529; F:sugar Dinuing, -
InterPro; IPR003353; AntifreezeII.
InterPro; IPR001304; Lectin_C.
InterPro; Lectin_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thesis (2002),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Bursa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             reveals that the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PubMed=15749883;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kaufman J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Characterisation of C-type lectin-like receptors in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                region."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Characterisation of C-type lectin-like reveals that the NK Complex and the MHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE
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                                                                                                                                                                                                                                                                                                                                   HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kaufman J.;
_TaxID=9606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EHPWEWVNRSPL----SHLFQVQGDGLCAYLGDAGLSSSHCSTRRNWVCTKPAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RREGPSRGACVTFQLTMAAVFTVLLITAVAFAVQAFQ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKSSSSKPSC----SCLVAITLGLLTAVLLSVLLYQWILCQGSNYSTCASCPSCPDRWM
                                                  ; Metazoa;
Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --GWRWEDGSPLNFSRISSNSF-VQ---TCGAINKNGLQASSCEVPLHGVCKKVRL 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174:3475-3483 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Department of Pathology and Microbiology, University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     United Kingdom.
                                               Chordata; Craniata;
Euarchontoglires; P:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viertlboeck B.C., Milne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 168.5; DB 2
Pred. No. 7.3e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                         188
                                                                         Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptors B-NK and B-lec share a common ancestral
                                                                                                                                                                                                                                                                                                         A
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RA Wagner-McPherson C., Layman D., Maas J., Jaeger S., Walker R.,
RA Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.B.,
RA Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.B.,
RA Fewell G.A., Delehaunty K.D., Miner T.L., Nash W.B., Cordes M., Du H.,
RA Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A.,
RA Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A.,
RA Sun H., Edwards J., Derden B., Courtney L., Kalicki J.,
RA Czersky P., Bielicki L., Scott K., Holmes A., Harkins R., Harris A.,
RA Czersky P., Bielicki L., Scott K., Holmes A., Harkins R., Harris A.,
RA Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Koolowicz-Reilly A., Leenard S., Rohlfing T., Rock S.M.,
RA Koolowicz-Reilly A., Leenard S., Rohlfing T., Rock S.M.,
RA Tin-Wollam A.-M., Abbott A., Minx P., Maupin R., Strowmatt C.,
RA Latreille P., Miller N., Johnson D., Murray J., Woessner J.P.,
RA Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Spieth J.,
RA Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Mardis B.R.,
RA Gillett W., Zhou Y., James R., Phelps K., Iadanoto S., Bubb K.,
RA Gillett W., Zhou Y., James R., Phelps K., Iadanoto S., Bubb K.,
RA Baertsch R.A., Brent M.R., Keibler B., Flicek P., Burk P., Suyama M.,
RA Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R.,
RA Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R.,
RA Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R.,
RA Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R.,
RA Bailey J.A., Wilson R.K.;
RA Wilson R.K.;
RA Waterston R.H., Wilson R.K.;
RA Waterston R.H., Wilson R.K.;
RA Waterston R.H., Wilson R.K.;
RA Water 424:157-164(2003).

CC --- SUBUNT: Interacts with TYROBP.
                                                                                                                                                 EMBL; AJ271684
EMBL; AC073647
HSSP; P22897; 1
Ensembl; ENSG00
      GO; GO:0005887; C:integral to plasma membrane; TJ
GO; GO:0005488; F:binding; TAS.
GO; GO:0005488; P:cellular defense response; TAS
GO; GO:0007165; P:signal transduction; TAS.
                                                                                                                                                                                                                                                                                                                                                                               This
                                                                                                                                                                                                                                                                                                            use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hillier L.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 1).
Mueller A., Merz H., Feller A.C.;
MEXPRESSION Of MDL-1 in human blood and
Submitted (JAN-2000) to the EMBL/GenBank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bakker A.B.H., Baker E., Sutherland G.R., Phillips J.H., Lanier L.L.; "Myeloid DAPI2-associating lectin (MDL)-1 is a cell surface receptor involved in the activation of myeloid cells."; proc. Natl. Acad. Sci. U.S.A. 96:9792-9796(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [1]
[U]
NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 2), FUNCTION, TISSUE SPECIF.
INTERACTION WITH TYROBP, AND MUTAGENESIS OF LYS-16.
MEDLINE-99380598; PubMed=10449773; DOI=10.1073/pnas.96.17.9792;
                                                                                                                            Ensembl; ENSG00000090269; HGNC; HGNC: 2054; CLEC5A.
                                                                                                                                                                                                                                         EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC
                                                                                                                                                                                                                                                                                                                                                                                                                    IsoId=Q9NY25-2; Sequence=VSP_012839; TISSUE SPECIFICITY: Expressed in peripheral blood monocytes and the monocyte/macrophage cell lines U937 and MonoMac6, but not ir cell lines of other origins. Expression is down-regulated when monocytes differentiate into dendritic cells.
SIMILARITY: Contains 1 C-type lectin domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBUNIT: Interacts with TYR SUBCELLULAR LOCATION: Type ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                      European
                                                                                                                                                                                                                                                                                                                                                    Swiss-Prot entry is copyright. It is produced through a deen the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Event=Alternative splicing; Named
                                                                                                          604987;
                                                                                                                                                                                           AF139768; AAF02491.1;
AJ271684; CAB71334.1;
AC073647; AAS07444.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBoId=Q9NY25-1;
                                                                                                                                                                                                                                                                                                            long as its content is in no way modified and
                                                                                                                                                                                                                                                                                                                                   Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  999; PubMed=12853948; DOI=10.1038/nature01782; Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H., Fon C., Layman D., Maas J., Jaeger S., Walker R., Fon M., Becker M.C., O'Laughlin M.D., Schaller M.E., Delehaunty K.D., Miner T.L., Nash W.E., Cordes M., D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence=Displayed;
                                                                                                                                                      Homo
                                                                                to plasma membrane; TAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYROBP
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                                                                                                                                                                                         mRNA.
Genomic_DNA.
                                                                                                                                                                                                                                           mRNA.
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                                                                                                                                                                                                                                                                                                               this
                                                                                                                                                                                                                                                                                                                                      restrictions
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                                                                                                                                                                                                                                                                                                                                                          collaboration -
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Best Local S
Matches 48
TISSUE-Ling and heart;

TISSUE-Ling and heart;

MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Scares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Stapleton M., J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Romak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPO DOM
DOMATN
CARBOHYD
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SEQUENCE
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DISULFID
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CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00059; Lectin
PRINTS; PR00356; ANTIF
SMART; SM00034; CLECT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Signal-anchor;
TOPO_DOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q52M11_HUMAN
Q52M11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00615; C_TYPE_LECTIN_1; F PROSITE; PS50041; C_TYPE_LECTIN_2; Alternative splicing; Glycoprotein;
                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                  13-SEP-2005 (TrEMBLrel. 31, 13-SEP-2005 (TrEMBLrel. 31, 13-SEP-2005 (TrEMBLrel. 31, C-type lectin, superfamily m
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN
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                                                                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Testis; MEDLINE=99279253; PubMed=10349636; Carninci P., Hayashizaki Y.; "High-efficiency full-length cDNA (Meth. Enzymol. 303:19-44(1999).
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01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
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Kawai J., Shinagawa A., Shibata K.,
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Buarchontoglires; Glires; Rodentia;
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      Kiyosawa
T., Bono
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    DOI=10.1038/35055500;
    Yoshino M., Itoh M.,
    Konno H., Adachi J., Fiyosawa H., Kondo S., Yama
    Bono H., Kasukawa T.,

                                                                                                                                                                                                                                                                                                    cloning.";
                                                                                                                                                                                                                                                                                                                                                                          DOI=10.1016/S0076-6879(99)03004-9;
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., Yamanaka
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RX MEDLINE-22354683; PLUMEd=12466851; DOI=10.1038/nature01266;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaido I., Osato N., Saitor R., Nozuki H., Yamanaka I., Kiyosawa H.,
RA Nikaido I., Osato N., Saitor R., Nozuki H., Yamanaka I., Kiyosawa H.,
RA Nikaido I., Osato N., Baitor V., Nozami A., Schonbach C., Gojobori T.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Godzik A., Frazer K.S.,
RA Gassterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Kanai A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Roid C.A., Serou M., Shinada K.,
RA Verardo R., Wagner L., Wahlested C., Wang Y., Watanabe Y., Wells C.,
RA Vuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Mayaraki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Hara A., Hashizume W., Imotani K., Lander E.S., Rogers J.,
RA Hara H., Vashino, M., Waterston R., Lander E.S., Rogers J.,
RA Hara L., Hayashizaki Y.;
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RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carminci P., de Bonaldo M.F.,
RA Blake J., Butt C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Lyons P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Hayashizaki Y.,
MEDIINE-20539913; PubMed-11078661; DOI=10.1101/gr.152600; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Pujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watchiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Tanaka T., Matsuura S., Kawai J., Watchi Integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer."; [6]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-C57BL/6J; TISSUE-Testis; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., It Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; "Normalization and subtraction of Cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new gegenome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Birney E., Hayashizaki Y.;
"Analysis of the mouse transcriptome 60,70 full-length cDNAs.";
Nature 420:563-573(2002).
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STRAIN=C57BL/6J; TI
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RX MEDLINE-2238825; pubMed=12477932; DOI=10.1073/pnas.242603899;

RX MEDLINE-2238825; pubMed=12477932; DOI=10.1073/pnas.242603899;

RA Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G.,

RA Alteschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Alteschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Hsieh F.R.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.R.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M.G., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Stapleton M.G., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Richards S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullahy S.J.,

RA Rodriguez S., Sanchez A.,

RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

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RA Rodriguez C.,

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RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Testis;
Director MGC Project;
Submitted (FEB-2005) to the EMBL/GenBank/D EMBL; AK076635; BAC33425.1; -; mRNA.
EMBL; BC089479; AAH89479.1; -; mRNA.
Ensembl; ENSMUSG0000047720; Mus musculus.
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GC; GC:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
Pfam; PF00059; Lectin C; 1.
SMART; SM00034; CLECT; 1.
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SEQUENCE 1
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STRAIN=C57BL/6J; TISSUE=Testis;
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                                                                                                 126
                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                   62
                                                                                                                                                                                                     67
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                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PS50041; C TYPE LECTIN_2; 1. ical protein; Lectin.
189 AA; 22107 MW; 2EE567
HGVCKK 186
                                                                                                                                                                                                                                                                                                    QNDYGPQQKSSSKPSCSCLV----AITLGLLTAVLLSVLLY-----QWILCQGSNY
                                                                                              LSE-AFCWIGL--RNNSG-WRWEDGSPL-NFSRISSNSFVQTCGAINKNGLQASSCEVPL 180
                                                                                                                                                   KTCDDEVKLCPKDWNKLRQNCFSRIQHKNSWLTANDTCELHDATLAVFIDKTEVEILMNQ
                                                                                                                                                                                                  STC-ASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVF
                                                                                                                                                                                                                                                     QTDTSPRLPQTSHERRHHRLMFDAKKVLTLWTLLGGAVAVLLWGFFSFPRKFTVTRTARN
                                            IQEMKTYWIGLHRONLLGIWVWTNGSKYNNLHEIQDHG---QCAFVHQKGIDSTSCEDQK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               22107 MW; 2EE5673DBAC2B39E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                12.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                           34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                              Score 131.5; DB 2
Pred. No. 0.00024;
                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                         66;
                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                             189;
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ka T.,
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179

EFICTR 184

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RESULT
Q96DR9
ID Q96DR9
AC Q9
DT 01
DT 01
DT 01
DT 01
DT 01
CO Be
GN Na
OC EU
OC Ma
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OC MA
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Best Local S
Matches 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ŧ
                                                                                                                                       096DR9;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X64719; CAA45972.1; -; mRNA.
HSSP; Q07108; 1FM5.
GO; GO:0004872; F:receptor activity;
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
Pfam; PF00059; Lectin C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muridae; Musinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=NKR-P1 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q61969 MOUSE PRELIMINARY;
Q61969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Natural killer cell receptor-P1 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Genomic structure and strain-specific killer cell receptor NKR-P1."; J. Immunol. 149:1957-1963(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-BALB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                      Q96DR9;
                                                                                                                                                                                                                                                                         Q96DR9_HUMAN PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Giorda R., Weisberg E.P., Ip T.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE
  Homo.
NCBI_TaxID=9606
                                                                                                       Homo sapiens (Human)
                                                                                                                               Name=BGK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS50041; C_TYPE_LECTIN_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=92388663; PubMed=1517565;
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                                                                                                                                                                                                                                                                                                         11
HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                163
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LELPTATQAQNDYGPQQKSSSSKPSCSC-------LVAITLGLLTAVLLS
                                                                                                                                                                                                                                                                                                                                                                                                             ITGVTENG----SC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SHILVITDNQEMSLLQVFLSEAF -- CWIGLR -- - NNSGWRWEDGSPLNFSRISSNSFVQT 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QKSSVQKICADVQENRTHTTDCSVNLECPQDWLSHRDKCFRVFQVSNTWEEGQADCGRKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LNLARIQEPKHDSPP----SLSPDTCRCPRWHRLALKFGCAGLILLVLVVIGLCVLVLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAINKNGLQASSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATLLLIQDQEELRFLLDSIKEKYNSFWIGLRFTLPDMNWKWINGT-----TFNSDVLK 170
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189 1
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(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
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21310 MW;
                                                     Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini; Homir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  176
                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 126; DB 2;
Pred. No. 0.00082
9; Mismatches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D605E4BD967073B0 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189
                                                     Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                      189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2;
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                                                                                                                                                                               update)
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Q9W012 DRC
Q9W012 DRC
ID Q9W011
AC Q9W01
AC Q9W01
AC Q9W01
DT 01-MA
DT 10-MA
RA Amman RA
Adams
RA Amman RA
Suttc
RA Bears
RA Cherr
RA Cherr
RA GOWOTE
RA Cherr
RA CHE
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J. Biol. Chem. 276:43818-43823(2001).

R EMBL; AF400597; AALL1713.1; -; mRNA.

RESP; O54709; 1HO8.

RESP; O54709; 1HO8.

RESP; O54709; C:integral to membrane; TAS.

RESP; G0:0016021; C:integral to membrane; TAS.

RESO; G0:0016021; F:mHC protesin binding; NAS.

RESO; G0:0008229; F:pattern recognition receptor activity; IDA.

GO; G0:000529; F:sugar binding; IDA.

RESO; G0:0019734; P:antifungal humoral response (sensu Vertebrance); G0:0019734; P:antifungal humoral response (sensu Vertebrance); G0:00019734; P:carbohydrate mediated signaling; TAS.

RESO; G0:0008937; P:cell recognition; IDA.

RESO; G0:0008937; P:defense response to pathogenic protozoa; NERCO; G0:0006930; P:phagocytosis, recognition; IDA.

RESO; G0:0048803; P:reduction of virulence; NAS.

RESO; G0:0042110; P:T-cell activation; TAS.
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Best Local S
Matches 32
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Q9W012;
01-MAY-2000
Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
Adams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,
Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
Ashburner M., Henderson S.N.,
George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Beasley E.M.,
Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Receptor.
SEQUENCE
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MEDLINE=21570237; PubMed=11567029; DOI=10.10
Willment J.A., Gordon S., Brown G.D.;
"Characterization of the human beta -glucan
alternatively spliced isoforms.";
J. Biol. Chem. 276:43818-43823(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE [1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster (Fruit fly).

Bukaryota, Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Bphydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ephydroidea; Dro
NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2000
10-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Neoptera; Endopterygota; Dip
Ephydroidea; Drosophilidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORFNames=CG9134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CG9134-PA,
                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=20196006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     107 DSHLLVITDNQEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92 HSOPTOSSLEDSVTPTKAVKTTGVLSSPCPPNWIIYEKSCYLFSMSLNSWDGSKROCWQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30 SSKPSCSC----LVAITLGLLTAVLLSVLLYQ-----WILCQGSN------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DROME PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GSNLLKIDSSNEL
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ipheral blood leukocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              isoform A (Cg9134-pc, isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel. 13, Created)
(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 30, Last annotation update)
* 'Creation' (Reiszesp)
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RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P. RA Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W. RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M., RA Harris N.L., Harvey D.A., Heiman T.J., Hernandez J.R., Houck J., RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C., RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A. RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z., Lianko, P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McShrefi A., RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McShrefi A., RA McHson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M., Naka M., Matton J., William J., McShrefi A., RA Palazolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., RA Shue B.C., Siden-Kiamos I., Stapleton M., Strong R., Sun E., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weisenbach J., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weisenbach J., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Venter E., Shao Q.A., RA Walliams S.M., Woodseg T., Worley K.C., M. D., Yang S., Yao Q.A., RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L., Palamos E.M., Rubin G.M., Venter J.C.; Thur Y., Smith H.O., The genome sequence of Drosophila melanogaster.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE.

NEDLINE=22426065; PubMed=12537568;

MEDLINE=22426065; PubMed=12537568;

Celniker S.E., Wheeler D.A., Kronmiller B., Carlson J.W., Halpern A.,

Celniker S.E., Wheeler D.A., Dugan S.P., Frise E., Hodgson A.,

Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A.,

Pacele J.M., Park S., Pfeiffer B.D., Richards S., Sodergren E.J.,

Sylrskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Venter C.,

Weinstock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M.;

"Finishing a whole-genome shotgun: release 3 of the Drosophila

melanogaster euchromatic genome sequence.";

Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.

MISDLINE=22426069; PubMed=12537572;

MISDLINE=22426069; PubMed=12537572;

Mistra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,

Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktearoglu L., Berman B.P.,

Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A.,

Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,

Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                  Berkercy
Celniker S., Carre
Celniker S., Stapleton
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Kaminker J.S., Bergman C.M., Kronmiller B., Carlson J.W.,
Patel S., Frise E., Wheeler D.A., Lewis S.E., Rubin G.M.,
Pathourner M., Celniker S.E.;

"The transposable elements of the Drosophila melanogaster
a genomics perspective.";
NUCLEOTIDE SEQUENCE
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Wan K., Pfeiffer
, Pacleb J., Park
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GO; GO:0005529; F:sugar binding;
InterPro; IPR001304; Lectin_C.
Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                 The C.briggsae Sequencing Consortium;
Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
-i- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Caenorhabditis briggsae.
Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
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                                                                                        CRC64;
                                         Length 189;
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  Indels
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RESULT 15
CHE202_CAEEL
ID CHE202_C
AC CHE202;
DT 01-JAN-1
DT 01-JAN-1
DT 01-MAR-2
DE Hypothet
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Best Local S
Matches 27
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Science 282:2012-2018(1998).
EMBL; AF09919; AAC68804.1; -; Genomic_DNA.
PIR; T33623; T33623.
HSSP; P22897; 1EGG.
Ensembl; F40G9.10; Caenorhabditis elegans.
WormBase; WBGeneo0018246; F40G9.10.
WormPep; F40G9.10; CE19857.
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin_C.
InterPro; IPR001304; Lectin_C.
OT8202_CAEEL PRELIMINARY;
O18202;
O1-JAN-1998 (TrEMBLrel. 05, Cr
O1-JAN-1998 (TrEMBLrel. 05, La
O1-MAR-2004 (TrEMBLrel. 26, La
Hypothetical protein Y48E1B.9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Hypothetical protein F40G9.10.
ORFMames=F40G9.10;
CASTONNET TO THE TABLE TO THE T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
Complete proteome; Hypothetical protein.
SEQUENCE 188 AA; 21382 MW; CFAC99F4B3032547 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=Bristol N2;
MEDLINE=99069613; PubMed=9851916;
The C. elegans sequencing consortium;
"Genome sequence of the nematode C. e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00059; Lectin C; SMART; SM00034; CLECT; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
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CAEEL
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27; Conserv
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                                                                                                                                                                                                                                                                                                                      ---FCWIGL-RNNSGWRWEDGSPLNF 151
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Last sequence update)
Last annotation updat
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Pred. No. 1.
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Search completed: January Job time: 100.009 secs
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Best Local S
Matches 42
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Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ensembl; Y48E1B.9; Caenorhabditis elegans.
Wormbase; WBGene00013008; Y48E1B.9.
Wormbap; Y48E1B.9; CB36239.
GO; GO:005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin_C.
Pfam; PF00059; Lectin_C; 1.
PRART; PS00059; Lectin_C; 1.
PROSITE; PS50041; C.TYPE LECTIN_2; 1.
Complete proteome; Hypothetical protein.
Complete proteome; Hypothetical PSDA964586072F0 CRC64;
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EMBL; Z93393; CAB07697.2; -;
PIR; T27020; T27020.
HSSP; P22330; 1FVU.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=6239;
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investigating biology.
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                                                                                                                         VCQIIK 184
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ilarity 22.6%;
Conservative 3
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                                   2006,
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Pred. No. 11;
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                                   15:35:26
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92.5
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Copyright (c) 1993 - 2006 Compugen Ltd.
 Length
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interferon-alpha-F
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conserved hypothet
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se (EC
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21.2K
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ALIGNMENTS

R;Guthmann, M.D.; Tal, M.; Pecht, I.

Proc. Natl. Acad. Sci. U.S.A. 92, 9397-9401, 1995

A;Title: A secretion inhibitory signal transduction mole A;Reference number: I59421; MUID:96016176; PMID:7568140

A;Accession: I59421

molecule

g

mast

cells is another C

C;Species: Rattus norvegicus (Norway rat)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change

09-Jul-2004

rat

mast cell function associated antigen - r C;Species: Rattus norvegicus (Norway rat)

I59421

C; Accession:

159421

A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-188 <RES>

Genetics:

Query Match

A;Cross-references: UNIPROT:Q64335; UNIPARC:UPI0000030101; EMBL:X79812; NID:g1020141;

2;

Length

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hypothetical protein F40G9.10 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004
C;Accession: T33623
R;Graves, T; Sutterer, C; Ozersky, P.
submitted to the EMBL Data Library, October 1998
A;Description: The sequence of C. elegans cosmid F40G9.
A;Reference number: Z21378
A;Accession: T33623
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A; Molecule type: DNA
                 A; Status: preliminary; translated
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.4%; Score 525.5; DB 2; Ilarity 53.5%; Pred. No. 5.5e-42; Conservative 29; Mismatches 57;
                     from GB/EMBL/DDBJ
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A;Molecule type: DNA
A;Residues: 1-189 <WIL>
A;Cross-references: UNIPROT:Q9XXB7; UNIPARC:UPI0000080A07; EMBL:AL023851; PIDN:CAA19555
A;Experimental source: clone Y68A4B
                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein Y68A4B.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T27306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, S. Smith, H.O.; Woese, C.R.; Venter, J.C.
A;Title: The complete genome sequence of the hyperthermophilic, sulfate-reducing archaec A;Reference number: A69250; MUID:98049343; PMID:9389475
A;Accession: F69262
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C;Accession: F69262

R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dodson, Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness, E.F. Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L. Nature 390, 364-370, 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein AF0102 - Archaeoglobus fulgidus
C;Species: Archaeoglobus fulgidus
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Residues: 1-188 <GRA>
A;Cross-references: UNIPROT:Q9TZ75; UNIPARC:UPI000007BD20; EMBL:AF099919; PIDN:AAC68804
A;Experimental source: strain Bristol N2; clone F40G9
C;Genetics:
                                                                                                                                                                                                                                                            A;Reference number: Z20341
A;Accession: T27306
A;Status: preliminary; translated
                                                                                                                                                                                                                                                                                                         submitted to the EMBL Data Library, A;Reference number: Z20341
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  Query Match
Best Local S
Matches 25
                                                                                      ;Map position: 5
;Introns: 21/1; 41/3; 78/1
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Best Local Similarity
Matches 20; Conserv
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                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMSLLQVF-----LSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNG 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KTNYVMIGLIFENREWSWTDGSSVNY 135
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    Conservative
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34.5%;
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31.4%; Pred. No. 0.23;
ative 10; Mismatches
                      19.8%;
    14;
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Pred. No.
  Score 55.5; DB 2;
Pred. No. 6.7e+02;
4; Mismatches 42;
                                                                                                                                                                                                                                                                from
                                                                                                                                                                                                                                                                                                                                  June 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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ERAD75
early E3 20.6K glycoprotein - human C;Species: Mastadenovirus h7 (human
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R;Pulkkinen, W.S.; Miller, S.I.

R;Pulkkinen, W.S.; Miller, S.I.

J. Bacteriol. 173, 86-93, 1991

A;Title: A Salmonella typhimurium virulence protein is similar to a Ye
A;Reference number: A39185; MUID:91100323; PMID:1846140

A;Accession: A39185

A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-188 < PUL>
A;Cross-references: UNIPROT:P23988; UNIPARC:UPI0000147B6E; GB:M55546;
C;Superfamily: phage lambda membrane protein lom
                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein C29F3.4 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 C;Accession: T19559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                virulence protein pagC precursor - Salmonella typhimurium C;Species: Salmonella typhimurium C;Date: 08-Nov-1991 #sequence_revision 08-Nov-1991 #text_
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                                                                                                                                                     A; Map position: 5
A; Introns: 32/3; 133/3
                                                                                                                                                                                           A;Gene: CESP:C29F3.4
                                                                                                                                                                                                                                 A; Experimental source: clone C29F3
                                                                                                                                                                                                                                               A; Residues: 1-189 <WIL>
A; Cross-references: UNIPROT:017613;
                                                                                                                                                                                                                                                                                        A;Status: preliminary; translated from GB/EMBL/DDBJA;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                              submitted to the EMBL Data A; Reference number: Z19142 A; Accession: T19559
                                                                                                                                                                                                                                                                                                                                                                                    R; Matthews, L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138 NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGL 171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NVKYRYEDDSPVSF--ISSLSYLYGDRQASGSVEPEGI 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LINVFIQ 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNSFVQ 161
                                    PSCPDRWMKY----GNHCYYFSVEEKDWNSSLEFCLA 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AMTGGHWLGARRTAACIGQLVTATCTRLNSFEWTDGSATGTDGFNWRLSDGEPNN---LF 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CPDRWMK----YGNHCYY----FSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVF 125
PVCPAGWFQFQRATGLWCYIFATPGAGWTTPQAACQA
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                                                                          Conservative
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                                                                                          5.4%;
29.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36.8%;
                                                                                                                                                                                                                                                                                                                                                                    Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 55; DB 2;
Pred. No. 7.4e+0
9; Mismatches
                                                                          Score 55; DB 2;
Pred. No. 7.5e+02;
4; Mismatches 18
                                                                                                                                                                                                                                                     UNIPARC: UPI00000783D6; EMBL: Z81043;
                                                                                                                                                                                                                                                                                                                                                                      October 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JB 2,
/.4e+02;
9;
                                                                                                              Length 189;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 188;
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                                                                                                                                                                                                                                                     PIDN: CAB02800.1;
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adenovirus adenovirus

27

(strain Gomen)

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A;Note: host Homo sapiens (man)
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 07-Nov-1997
C;Accession: A31830
R;Hong, J.S.; Mullis, K.G.; Engler, J.A.
Virology 167, 545-553, 1988
A;Title: Characterization of the early region 3 and fiber genes of Ad7.
A;Reference number: A94386; MUID:89073758; PMID:2849239
                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Residues: 1-189 <SIM>
A;Cross-references: UNIFROT:OSPE95; UNIFARC:UPI0000C2626; GB:AE003949; GB:AE003849; NII
A;Cross-references: UNIFROT:OSPE95; UNIFARC:UPI0000C2626; GB:AE003949; GB:AE003849; NII
A;Experimental source: strain 9a5c
R,Simpson, A,J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Asriones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. as.Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
submitted to Gensbank, June 2000
A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Junqueira, M.L.; Kemper, E.L.; Liajur Chado, M.A.; Madeira, A.M.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E.A.; M.M.S.; Marcins, C.L.; Marques, M.V.; Martins, F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A; F.G.; Nunes, L.R.; Oliveira, M.A.; de Rosa Jr. V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak A;Authors: da Silva, A.J. de M.; de Rosa Jr. V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak A;Authors: da Silva, A.J. C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveira, M.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Za, Reference number: A59328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Xylella fastidiosa (c;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-20 (c;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-20 (c;Date: 18-Aug-2000 #sequence consortium of the Organization for Now Nature 406, 151-157, 2000 #sequence of the plant pathogen Xylella fastidiosa. A;Title: The genome sequence of the plant pathogen Xylella fastidiosa. A;Reference number: A82515; MUID:20365717; PMID:10910347 A;Note: for a complete list of authors see reference number A59328 below A;Accession: D82719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Accession: A31830
A;Accession: A31830
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-189 <HON>
A;Cross-references: UNIPARC:UPI00001749B3; GB:M23696; NID:g341012
A;Cross-references: UNIPARC:UPI00001749B3; GB:M23696; NID:g341012
A;Note: the GenBank entry ADRH7FIBER PID:g576456 differs from the public, Superfamily: adenovirus early B3 20.5K glycoprotein
C;Keywords: early protein; glycoprotein
C;Keywords: early protein; glycoprotein
C;Keywords: early site: carbohydrate (Asn) (covalent) #status predicted
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                              NQEMSLLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASS 175
                                                                                                                                                                                                                                                                                                                           flavodoxin
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28.1%;
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Pred. No. 8.3e+02;
9; Mismatches 13;
                                                                                                                                                                                             Score 54.5; DB 2;
Pred. No. 8.3e+02;
8; Mismatches 29;
                                                                                                                                                                                                                                                            Length 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 189;
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                                                                                                                                                                                                    Gaps
                                                                            156
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C;Species: Homo sapiens (man)
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 31-Dec-2004
C;Accession: JC5394
R;Nagakubo, D; Taira, T.; Kitaura, H.; Ikeda, M.; Tamai, K.; Iguchi-Ariga, S.M.M.; Arigenchem. Biophys. Res. Commun. 231, 509-513, 1997
A;Title: DJ-1, a novel oncogene which transforms mouse NIH3T3 cells in cooperation with A;Reference number: JC5394; MUID:97223489; PMID:9070310
A;Accession: JC5394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: mRNA
A;Residues: 1-189 <NAG>
A;Cross-references: UNLTROT:099497;
C;Comment: This protein is involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:P11322; UNIPARC:UPI0000129ADF; GB:M15952; NID:g209901; PIDN A;Note: the authors translated the codon ATG for residue 161 as Ile and TTG for 165 as C;Superfamily: adenovirus early E3 20.5K glycoprotein C;Keywords: early protein; glycoprotein C;Keywords: early protein; glycoprotein C;Keywords: early protein; glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A91566; A; Accession: F29500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Signaes, C.; Akusjaervi, G.; Pettersson, U. Gene 50, 173-184, 1986
A;Title: Region E3 of human adenoviruses; differences between the oncogenic adenovirus-A;Reference number: A91566; MUID:87219876; PMID:3582978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          early E3 20.5K glycoprotein - human adenovirus 3 C;Species: Mastadenovirus h3 (human adenovirus 3) C;Date: 31-Mar-1989 #sequence_revision 31-Mar-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DJ-1 protein -
hypothetical protein, 20.5K - human adenovirus C;Species: Mastadenovirus h7 (human adenovirus C;Date: 19-May-1995 #sequence_revision 21-Jul-J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Genetics:
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A; Residues: 1-189 <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Accession: F29500
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                                                                                    S52803
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Best Local S
Matches 19
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                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                         89
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                                                                                                                                                                                                                                                                                         NSLDYNIIVVPATTSA----PRKSTFSSSSAKASTIPKTASAMLKLPKIALSNSTAAPN 143
                                                                                                                                                                                                                                                                                                                                             DSVIYSMLELPTATQAQNDYGPQQ---KSSSSKPS-----CSCLVAI--
                                                                                                                                                                                                                                           ----TLGLLTAVLLSVLLYQWILC 61
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                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         4.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Score 49.5; DB 1;
Pred. No. 2.4e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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enovirus 7) 21-Jul-1995

#text_change 09-Jul-2004

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R;(Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; E. D.; Jones, L.M.; Karst, U. Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J. A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AE1446
R;DelVecchio, V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; Ivanova, ; Mazur, M.; Goltsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Letess Proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A;Title: The genome sequence of the facultative intracellular pathogen Brucella melitens A;Reference number: AD3252; PMID:11756688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Experimental source: C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Listeria innocua
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AE1446
C;Accession: AE1446
                                                                                                                               norE protein [imported] - Brucella melitensis (strain 16M)
C;Species: Brucella melitensis
C;Date: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 09-Jul-2004
C;Accession: AH3634
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C;Species: Listeria innocua
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        submitted to the EMBL Data Library, April 1995
A;Description: Sequence analysis of the E3 region and fiber gene of human adenovirus
A;Reference number: S52798
A;Accession: S52803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: S52803
R; Kajon, A.E.; Wade
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A; Residues: 1-189 < GLA>
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A; Residues: 1-189 < KAJ>
                                                                                                                                                                                                                                                 RESULT 13
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A;Experimental source: strain Clip11262
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Best Local S
Matches 18
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TIPKSTIGIITAVVVGLMII--FLC
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23.7%; Pred. No. 2.
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urand, L.; Dussurget, O.; Entian,
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.A.; Voss, H.; Wehland
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tian, K.D.;
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60S ribosomal protein L9 [imported] - Guillardia theta nucleomorph C:Species: nucleomorph Guillardia theta A;Note: a nucleomorph is the vestigial nucleus of a eukaryotic endosymbiont C:Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004 C;Accession: H90106 R;Douglas, S:; Zauner, S:; Fraunholz, M:; Beaton, M:; Penny, S:; Deng, L.T.; Nature 410, 1091-1096, 2001 A;Title: The highly reduced genome of an enslaved algal nucleus. A;Reference number: A99082; MUID:11323671; PMID:11323671 A;Accession: H90106 A;Status: preliminary A;Molecule type: DNA
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Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Maok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Title: Comparative genomics of Listeria species.
A;Title: Comparative AB1077; MUID:21537279; PMID:11679669
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H90106
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A; Molecule type: DNA
A; Residues: 1-189 <KUR>
A; Cross-references: UNIPROT:Q8YB99; UNIPARC:UPI0000586D6; GB:AE008918; PIDN:AAL54243.1;
A; Gynarimental source: strain 16M
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C;Species: Listeria monocytogenes
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AC1355
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.;
R;Glaser, P.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; I
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A;Gene: BMEII1001
A;Gene: Transporter of the control o
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C;Superfamily: methylphosphotriester-DNA methyltransferase; methylphosphotriester-DNA
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A; Residues: 1-188 <GLA>
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1 Similarity 26.2%; Pred. No. 3.3e+03;
17; Conservative 12: Minute 13: Minute
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Arabidops

Query Match Best Local Similarity

100.0%;

Score 1036; DB Pred. No. 3e-96;

2

Length 188;

Sequence

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A soluble form of mast cell function-associated antigen (MAFA) can produced by recombinant techniques for use in the ligand- screening assay. The ligands that are identified may be used alone or in combination with the MAFA to prevent inflammatory and allergic reactions.

reactions

be

Novel DNA encoding a mast cell function-associated antigen (MAFA) - useful for screening for ligands of MAFA which are useful for prevention of inflammatory and allergic reactions.

Claim 12; Page 37; 54pp; English.

WPI; 1995-366356/47. N-PSDB; AAT01471.

Pecht I, Guthmann MD,

3

(YEDA) YEDA RES & DEV CO LTD (RYCU/) RYCUS A.

08-APR-1994;

94IL-00109257.

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ALIGNMENTS

RESULT 1 AAR77033 AAR77033 standard; protein; 188 AA. Rattus rattus. prevention. Mast cell function-associated antigen; MAFA; soluble; ligand; identification; screening; inflammation; inflammatory; allergy; allergic; Mammalian mast cell function-associated antigen (MAFA) 01-FEB-1996 AAR77033; WO9527734-A1 06-APR-1995; 19-OCT-1995. (first entry) 95WO-US004258

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                                            This is the amino acid sequence of rat mast cell function-associated antigen (MAFA), a type II membrane glycoprotein found on mast cells and basophils. The invention relates to cloning of the human MAFA molecule (see AAW88265) and to the discovery of splice variants (see AAW88266-67) of human MAFA that are not found in rat. Polypeptides and synthetic peptides (see AAW88258-64) based on human MAFA and human truncated MAFA, and polynucleotides encoding them, can be used in methods for the treatment of inflammatory and allergic diseases (e.g. rheumatoid arthritis and asthma), and tumour growth
  Sequence 188 AA,
                                                                                                                                                                                                                                                                                                                         Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide having a sequence corresponding to human mast cell function-associated antigen - useful in forming and manufacturing pharmaceutical compositions in the treatment of inflammatory and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hewitt EL,
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DB; AAV84222.
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          killer (NK) or T-cell-expressed cell surface MAFA from binding to MAFA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA binding to a ligand on a target cell, by contacting the pharmaceutical composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in an amount sufficient to inhibit cell surface MAFA binding to the ligand on the target cell. The agent or the composition is useful for treating a tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell or CTL-susceptible
                                                                                                                                                                     The present invention relates to a pharmaceutical composition comprising an agent which specifically binds to a mast cell function associated antigen (MAFA) ligand on a target cell, and prevents or inhibits natural killer (NK)- or T-cell-expressed cell surface MAFA from binding to MAFA
                                                                                                                                                                                                                                                                                        Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bind to mast cell function-associated antigen ligand on target cell.
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The invention is also useful for inhibiting
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The present invention relates to a pharmaceutical composition comprising an agent which specifically binds to a mast cell function associated antigen (MAFA) ligand on a target cell, and prevents or inhibits natural killer (NK) - or T-cell-expressed cell surface MAFA from binding to MAFA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA binding to a ligand on a target cell, by contacting the pharmaceutical
                                                                                                                                                                                                                                               Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bind to mast cell function-associated antigen ligand on target cell.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CH2 constant region, CH3 constant region, IgG1; antibody dependent cell-mediated cytotoxicity; ADCC; complement fix malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma; rheumatoid arthritis; myasthenia gravis; Grave's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                           17-JAN-2001; 2001US-0367358P
17-JAN-2002; 2002US-00053530
03-JUN-2002; 2002US-0385691P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neuroprotective; hinge region; immunoglobulin heavy CH2 constant region; CH3 constant region; IgG1;
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                                                                                                                                                                                        Hayden-Ledbetter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mellitus;
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80.7%;
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eavy chain;
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New binding domain-immunoglobulin fusion protein, useful for treating subject having or suspected of having a malignant condition or a B-cel disorder, e.g. melanoma, Grave's disease or autoimmune disease.

eating a B-cell

Disclosure;

SEQ ID

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RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 103;
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                                      ADY19892
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                                                                             ADY19892 standard;
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                                                                                                                                                                                                                                                                       LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                                                                                                                                                                       CQGSNYSTCASCPSCPDRWMXYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
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(first entry)
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                                                                             protein; 189
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55.1%; Pred. 1
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No. 1.1e-46;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antirheumatic; Antiarthritic; Osteopathic; Hemostatic; Antianemic; Antithyroid; Antidiabetic; Nephrotropic; CNS-Gen.; Hepatotropic; Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic;
                    Mast cell function-associated antigen; MAFA; splice variant; human; inflammation; allergy; asthma; rheumatoid arthritis; tumour; therap
                                                                             Human mast cell function-associated antigen (MAFA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 8; SEQ ID NO 5698; 158pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid encoding PRO polypeptide, useful for diagnosing and treating an immune related disorder, e.g. systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus
                                                                                                                                                                                                AAW88265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Abbas A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-AUG-2003; 2003US-0493546P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-AUG-2004; 2004WO-US026249
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRO polypeptide SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GETH ) GENENTECH INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                              standard; protein; 189
                                                                                                                                                                                                                                                                                                HWVCKKV
                                                                                                                                                                                                                                                                                                                                                                                                      LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
                                                                                                                                                                                                                                                                                                                                                                           LLQVFLSEAFCWIGLRINSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
                                                                                                                                                                                                                                                                                                                                     QWICEKV 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clark H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Æ,
                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              relates to an isolated nucleic acid encoding
                                                                                                                                                                                                                                                                                                  187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouyang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52.7%; Score 545.5; DB 9 55.1%; Pred. No. 1.1e-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Williams MP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       189;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mellitus.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                 This is the amino acid sequence of human mast cell function- associated antigen (MAFA), a type II membrane glycoprotein. cDNA (see AAV84198) encoding human MAFA can be obtained from myelogenous leukaemic cell line KUB12 or cDNA derived from human lung tissue. The encoded protein is similar to the rat form (see AAW88277) having an intracellular domain containing a putative immunoreceptor tyrosine activation motif (ITIM) and an extracellular lectin-like domain. 2 Alternatively spliced forms (see AAW88266-67) of human MAFA have been identified. Polypeptides and synthetic peptides (see AAW88258-64) based on these truncated MAFA proteins can be used in methods for the treatment of inflammatory and allergic diseases, and tumour growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide having a sequence corresponding function-associated antigen - useful in forming pharmaceutical compositions in the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9854209-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDE
                                                                                                                         LFOEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL 179
                                                                                                                                                                                                    MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL 60
                                                                                                                                                                                                                                                                                                            189 AA;
                                                                          QWICEKV 186
                                                                                                                                                                                                                               MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
                                                   HGVCKKV
                                                                                                                                                     COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS
                                                                                                                                                                              CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN 120
                                                                                                  LLOVFLSEAFCW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and tumour growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lamers MBAC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fig 1; 44pp; English.
                                                                                                                                                                                                                                                            Conservative
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137. .139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                   187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 67
                                                                                                                                                                                                                                                                     50.7%;
                                                                                                     IGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Asn is N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Asn is N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Asn is N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "ITIM motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Asn is N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lamont A,
                                                                                                                                                                                                                                                         29;
                                                                                                                                                                                                                                                                       Score 525.5; DB 2
Pred. No. 1.2e-44;
                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Williams
                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                            57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and manufacturing inflammatory and allergic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to human mast cell
                                                                                                                                                                                                                                                                                 Length
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                                                                                                                                                                                                                                                                                     189;
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                                                                                                                                                                                                                                                                                                                                    The present invention relates to a pharmaceutical composition comprising CC an agent which specifically binds to a mast cell function associated CC antigen (MAFA) ligand on a target cell, and prevents or inhibits natural CC killer (NK) - or T-cell-expressed cell surface MAFA from binding to MAFA CC ligand and a pharmaceutically acceptable excipient. The invention is CC useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA composition in vitro, ex vivo or in vivo by administering the composition CC composition in vitro, ex vivo or in vivo by administering the composition CC to the subject, to NK or T-cell surface MAFA binding to the ligand CC on the target cell. The agent or the target cell e.g. tumour cell, in CC tumour systimulating the cytotoxic activity of an NK cell or a cytotoxic CC tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic cumour cell. The invention is also useful for inhibiting an activity of CC tumour cell. The invention is also useful for inhibiting an activity of CC NK cell or a T-cell. The present sequence is human MAFA protein
                                                                                                                                                                                                                                           Matches 100;
                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bin to mast cell function-associated antigen ligand on target cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-MAR-2001; 2001WO-US008596
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 10; Page 18; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Takahashi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAR-2000; 2000US-0190716P
                                                                                                                                                                                                                                                                                                           Sequence 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GEMI-) GEMINI SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mmunosuppressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-611482/70.
DB; AAD18734.
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                                                                                                                                                                                                  1 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLLYQRTL
                                                                                                                                                                                                                                                           Similarity
                                   LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                      LFQEYVGEDFYMIGLRDIDGWRWEDGPALSLS-ILSNSVVQXCGTIHRCGLHASSCEVAL 179
                                                                                                      COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS
                                                                                                                      CCGSKGFMCSQCSRCPNLWMENGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN 120
                                                                                                                                                                    QWICEKY 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cell
                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                             A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mikayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      function associated antigen (MAFA) protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic.
                                                                                                                                                                                                                                         50.7%; Score 525.5; DB 4; 53.5%; Pred. No. 1.2e-44; tive 29; Mismatches 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H
                                                                                                                                                                                                                                               Indels
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a method of producing transgenic animal having modified resistance to a disease. The method involves introducing retrovirus having polynucleotide sequence encoding protein that modifies disease resistance of animal, into cell of animal. The invention is useful for screening proteins capable of modifying resistance of an animal to a disease, for producing transgenic bird and fish and also useful in gene therapy. The present sequence is the chicken major histocompatibility complex (MHC) C-type lectin receptor, B-lec protein. This sequence is used to produce a transgenic animal having modified
 AAM78675;
                          AAM78675 standard;
                                                                                                                                                                                                                                                                                                                                  Sequence 188 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 8; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Producing transgenic animal having modified resistance to disease, introducing retrovirus having polynucleotide sequence encoding prothat modifies disease resistance of animal, into cell of animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Transgenic animal; disease-resistance; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chicken MHC C-type lectin receptor, B-lec protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AEA89021 standard; protein; 188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-DEC-2004; 2004WO-GB005108
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                                                                                                                                                                                                                                                                                                                                                             resistance to a disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carroll M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ANIM-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (OXFO-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gallus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OXFORD BIOMEDICA UK LTD INST ANIMAL HEALTH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      major histocompatibility complex; receptor
                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                             ALS--LSILSNSVVQKCGTIHRCGLHASSCEVALQWICEK 185
                                                                                                                                                          DESNWTSSQNNCSALGASLAVFDSAEDLSFTMRHKGSSPHWVGL-SREGKEHPWEWVNRS
                                                                                                                                                                                      EKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGEDFYWIGLRDIDG----WRWEDGP 147
                                                                                                                                                                                                                 CVTFQLTMA-AVFTVLLITAVAF-----AVQAFQPHPQPCAQCPFDWIGFRGKCYYFSE
                                                                                                                                                                                                                                              CVSYLVMVALGLLTVILMSLLLYQRTLCCGSKGFM--CSQCSRCPNLWMRNGSHCYYFSM
                                                                                                  PLSHLFQVQGDGL---CAYLGDAGLSSSHCSARRNWVCTK 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kaufman
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                          protein; 188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                      15.9%; Score 164.5; DB 9; 25.0%; Pred. No. 3.5e-08;
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                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                          68;
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Best Local S
Matches 47
                                                                                                                                                                                                                                               The invention relates to polynucleotides (AAK51456-AAK51435) and the encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polynucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, immunomodulatory activity and activity, inhibin activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111 (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the sequence listing were missing at the time of publication
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Ma Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopoiesis; tissue growth factor; immunomodulatory; cancer; leukaemia; nervous system disorder; arthritis; inflammation.
                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acids encoding polypeptides with in diagnosis and gene therapy.
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19-JUL-2000;
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27-APR-2000;
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20-OCT-2000;
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                                                                                                                                                                     Local Similarity nes 47; Conserv
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Y, Zhao QA, W;
Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001-476283/51.
 125
                           129
                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Page 3580; 6221pp; English.
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                                                                                                                                         40 MVALGLITVII----MSLLL------YQRTLCCGS-------KGFMCS
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                                                                                                                                                                                                                            188
EKYFIGLIYHREEKRWRWINNSVFNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR
                          DFYWIGL---RDIDGWRWEDGPALSISILSNSVVQKCGTIHRCGL----HASSCEVALQW
                                                       RSYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDA
                                                                                   QC--SRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGE
                                                                                                             MIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT
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; 2000US-00560875.
; 2000US-00598075.
; 2000US-00620325.
; 2000US-00629325.
; 2000US-00654936.
; 2000US-00693325.
; 2000US-00728422.
                                                                                                                                                                  15.4%; ilarity 25.5%; Conservative 31
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Wang D, W
, Wejhrman
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Wang
an T,
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                                                                                                                                                                     Score 159.5; DB 4;
Pred. No. 1.1e-07;
1; Mismatches 65;
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g J, Zhang J,
Goodrich R;
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Chen
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182 182

ICEK 185

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ARBSULT 11
ARAUGOST1
IID ARAUGO
XX AAUGO
AC AAUGO
XX DT 07-SE
XX Humar
KW Bkele
KW muscu
AXX Homo
XX Homo
                                                               The sequence represents human INTERCEPT 289 form 1a polypeptide. This CC protein and similar others exhibit the ability to affect growth, crystal, differentiation, activity, morphology, or convenent/migration of, e.g. T cells and cells of the heart, liver, cc movement/migration of, e.g. T cells and cells of the heart, liver, cc mode, peripheral blood leukocyte, bone marrow or thymus tissue. They can be used as modulating agents for regulating cellular processes, thus, the cc proteins and their associated nucleic acids can be used to prognosticate, cc prevent, diagnose, or treat disorders associated with physiological cc processes. These disorders include abnormal blood coagulation, asthma, cc anaphylaxis, hepatitis, multiple sclerosis, cancer, coronary artery cd disease, malaria, atopic dermatitis, amyotrophic lateral sclerosis, canbases, malaria, atopic dermatitis, amyotrophic lateral sclerosis, compitis, attention deficit disorder, Crohn's disease, gastroenteritis, colitre, hypoglycaemia, diabetes mellitus, endometriosis, pulmonary cembolism and muscular dystrophy. Antibodies to disorders such as these can be made by providing a polypeptide of the invention to an immuno-cc competent vertebrate and harvesting blood or serum from the vertebrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; INTERCEPT 289; T cell; heart; liver; pancreas; placenta; brain; skeletal muscle; kidney; spleen; lymph node; peripheral blood leukocyte; bone marrow; thymus tissue; abnormal blood cosquiation; asthma; cancer; anaphylaxis; hepatitis; multiple sclerosis; coronary artery disease; malaria; atopic dermatitis; amyotrophic lateral sclerosis; meningitis; attention deficit disorder; Crohn's disease; gastroenteritis; goltre; hypoglycaemia; diabetes mellitus; endometriosis; pulmonary embolism; muscular dystrophy; immuno-competence; vertebrate; blood; serum; lung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid molecule of human and other animal disorder, cellular processes.
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RESULT 12
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Best Local Similarity
Matches 47; Conserv
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27-APR-2000; 2000US-00559497.
24-MAY-2000; 2000US-00578063.
16-JUN-2000; 2000US-00596194.
23-JUN-2000; 2000US-00602871.
30-JUN-2000; 2000US-00608452.
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10-SEP-1999;
19-OCT-1999;
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  WPI; 2003-456290/43
                                                 Holtzman
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(LEIB/
(HOLT/
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                                                                                                                                                                                                                                                                                                           (BARN/)
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                                                                                   SHARP J D.
S() KIRST S J.
R() MYERS P S.
Y) LEIBY K R.
HOLTZMAN D A.
Y) MCCARTHY S A.
WRIGHTON N.
MACKAY C R.
GOODEARL A D J.
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                                  t CC,
n DA,
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                                                 Barnes TM, Sh, Mccarthy SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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99US-00420707
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SA, Wrighton N,
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Pred. No. 1.1
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                                                   SJ, Myers PS, Leiby KR;
Mackay CR, Goodearl ADJ;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prognostic assays, monitoring clinical trials and pharmacogenetics) and prophylactic and therapeutic methods. The sequences are used in diagnosing, preventing or treating proliferative disorders (e.g. diabetes or thyroid disorders), immune disorders (e.g. multiple sclerosis or lupus), neurological disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. myocardial infarction or congestive heart disease), blood platelet disorders (e.g. sthrombocytopenia or anaemia) and disorders involving blood vessels (e.g. atherosclerosis or vasculitis). The nucleic acids may also be used in chromosome mapping, tissue typing and forensic biology, and as surrogate markers. This sequence represents a secreted polypeptide-related protein of the invention. Note: The sequence data for this patent was obtained in electronic format directly from USPTO at
 04-SEP-2003
                                                                                                                                                           rheumatoid arthritis; collagen-induced; immunosuppressive; antirheumati antiarthritic; osteopathic; antigout; antiinflammatory; dermatological;
                                                                                                                                                                                                                                 Human c-type (calcium dependent, carbohydrate-recognition
                                                                                                                                                                                                                                                                                                                                        ADP65310 standard; protein; 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seqdata.uspto.gov/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to secreted polypeptide-related proteins and nucleic acids (TANGO and INTERCEPT proteins and nucleic acids). The nucleic acids, proteins and antibodies specific to the proteins are useful in screening assays, predictive medicine (e.g. diagnostic assays,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Fig 11A-11C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TANGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ACD66719, ACD66720
                                   WO2003072827-A1
                                                                                                                                                                                                                                                                      12-AUG-2004
                                                                                                                         fibromyalgia;
                                                                                                                         .mmunomodulatory; lupus; ankylosing ibromyalgia; osteoarthritis; gout;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid molecule encoding a secreted protein (e.g. TANGO 202, 30 210 or INTERCEPT 217), useful for diagnosing, preventing or sting disorders such as cancer, diabetes or atherosclerosis, and in ensic biology.
                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                 182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 ICEK 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EKYFIGLIYHREEKRWRWINNSVFNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DFYWIGL---RDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGL----HASSCEVALQW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RSYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QC--SRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ICEK 185
                                                                                                                                                                                               disease; arthritide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
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Pred. No. 1.1
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                                                                                                                                                                                               gene
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                                                                                                                       spondylitis;
juvenile rheu
                                                                                                                                                                                            expression analysis;
                                                                                                                                                                             immunosuppressive; antirheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .le-07
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                                                                                                                                                                                                                                   domain) lectin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC patient sample containing mRNA, analysing gene expression using the mRNA CC that results in a gene expression signature to diagnose or analyse the autoimmune disease CC gene expression signature to diagnose or analyse the autoimmune disease CC or arthritides in the patient, where gene expression of at least 60% of CC the genes correlates with that of the gene signature. The invention CC further comprises: a treatment of rheumatoid arthritis; in a mammal CC expression of a transposis or comprises of the treatment of rheumatoid arthritis; in a mammal CC expression or targeting in the treatment of rheumatoid arthritis; diagnosis or CC analyses of autoimmune disease or rheumatoid arthritis; diagnosis or CC analyses of autoimmune disease or rheumatoid arthritis; diagnosis or compositions of the invention have the following conduced arthritis. The compositions of the invention have the following contivities; immunosuppressive, antirheumatic, antiarthritic, osteopathic, CC antigout, antiinflammatory, dermatological, and immunomodulatory. The CC methods and compositions of the present invention are useful for continuously and treating autoimmune disease or arthritides, such as continuous disease or arthritides, such as continuous disease or arthritides. Note: This sequence represents a continuous disease or arthritides. Note: This sequence is not shown the specification. It has been supplied in an electronic format from continuous diseases or arthritides. Note: This sequence is not shown the specification. It has been supplied in an electronic format from the specification. It has been supplied in an electronic format from the specification.
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Best Local S
Matches 47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diagnosing and analyzing autoimmune disease using gene expression profiles and microarray technology, useful for diagnosing and treating rheumatoid arthritis, lupus, fibrositis, osteoarthritis, fibromyalgia and the contraction of the contrac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page; 56pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENBANK; NP_037384.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2003-712740/67.
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182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   l Similarity 47; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188
                                                                    ICEK 185
                                                                                                                                           EKYFIGLIYHREEKRWRWINNSVFNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR
                                                                                                                                                                                                                DFYWIGL---RDIDGWRWEDGPALSISILSNSVVQKCGTIHRCGL----HASSCEVALQW 181
                                                                                                                                                                                                                                                                                           RSYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDA
                                                                                                                                                                                                                                                                                                                                                           QC--SRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGE
                                                                                                                                                                                                                                                                                                                                                                                                                                       MIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MVALGLLTVIL----MSLLL-------YQRTLCCGS-------KGFMCS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.4%;
llarity 25.5%;
Conservative 3
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185
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 159.5; DB 7
Pred. No. 1.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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RESULT 14 ADQ10144 ID ADQ10 XX

ADQ10144

standard; protein; 188

181

124

64

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29-JUN-12-2

10-SEP-1999; 99US-0420707.

R 19-OCT-1999; 99US-0479249.

R 07-JAN-2000; 2000US-00559497.

R 27-APR-2000; 2000US-00559497.

PR 24-MAY-2000; 2000US-00596194.

PR 23-JUN-2000; 2000US-0508871.

PR 23-JUN-2000; 2000US-00608871.

PR 30-JUN-2000; 2000US-00759130.
                               CC encode. The invention also relates to a host cell containing a compoundment of the invention, an antibody which selectively binds with a polypeptide of the invention, a method of detecting the presence of a cc polypeptide in a sample, a method of identifying a compound which binds cc with a polypeptide, and a method of modulating the activity of a cc polypeptide. The polynuclectides, polypeptides and compositions are cuseful for diagnosing, preventing and/or treating cancer, obesity, cc gastritis, diarrhoea, haemorrhoids, sathma, anaemia, graft-versus-host cc reactions, allergic reactions, cystic fibrosis, hypogonadism, cc cardiovascular disorders, arthritis, osteoarthritis, arteriosclerosis, hypertension, bacterial infections, postoastritis, arteriosclerosis, compatitis, allerence of disease, Alls, tuberculosis, viral infections, malaria, goiter, confertility, endometriosis, wounds and muscular disorders. This sequence crepresents a human polypeptide of the invention. Note: The sequence data for this patent did not form part of the printed specification but was contained in electronic format from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; cancer; obesity; gastritis; diarrhoea; haemorrhoid; asthma; anaemia; graft-versus-host reaction; allergic reaction; cystic fibrosis; hypogonadism; cardiovascular disorder; arthritis; osteoarthritis; arteriosclerosis; hypertension; bacterial infection; psoriasis; diabetes mellitus; hepatitis; Alzheimer's disease; Huntington's disease; parkinson's disease; AIDS; tuberculosis; viral infection; malaria; goiter; infertility; endometriosis; muscular disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human polypeptide #25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New TANGO, INTERCEPT, and MANGO, useful in diagnosing, preventing, treating cancer, constipation, hemorrhoids, cystic fibrosis, hypogonadism, psoriasis, hepatitis, Alzheimer's disease, AIDS, tuberculosis, malaria, goiter, infertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-JUN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to human polynucleotides and the polypeptides they
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 9; SEQ ID NO 83; 483pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-) MILLENNIUM PHARM INC
seqdata.uspto.gov/sequence.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2004-479675/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Barnes TM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00333159
99US-00342364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sharp JD, Kirst
SA, Wrighton N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SJ, Myers PS, Leiby KR;
Mackay CR, Goodearl ADJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
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Query Match Best Local Similarity Matches 47; Conserv

Conservative

31;

15.4%;

Score 159.5; DB 8; Pred. No. 1.1e-07; %1; Mismatches 65;

Indels Length 188;

41;

Gaps

7;

Sequence

188

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ADP25141
ID ADP25
XX ADP25
XX IB-NO
DT 18-NO
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DT PRO
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DX PRO;
KW osteo
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                     polypeptide encoded by it. A protein of the invention has antiinflammatory, antiarthritic, antirheumatic, immunosuppressive, osteopathic, antidabetic, dermatological, antiportatic, antiallergic, antiasthmatic, hepatotropic, and respiratory activity. A polynucleotide of the invention may have a use in gene therapy. The PRO polypeptide, its agonist, antagonist, or antibody that specifically binds to the polypeptide is useful for treating an immune related disorder such as systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, a puvenile chronic arthritis, a spondyloarthropathy, systemic selerosis, an idiopathic inflammatory myopathy. Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, a demyelinating disease of the central or peripheral nervous system, idiopathic demyelinating polyneuropathy, Gullain-Barre syndrome, system, idiopathic demyelinating polyneuropathy, a heartchiliary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clark H,
Wu TD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New PRO polypeptides and polynucleotides, useful for treating e.g erythematosus, rheumatoid arthritis, diabetes mellitus, immune-mer renal disease, or demyelinating diseases of the central or periph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRO; antiinflammatory; antiarthritic; antirheumatic; immunosuppressive; osteopathic; antidiabetic; dermatological; antipsoriatic; antiallergic; antiasthmatic; hepatotropic; respiratory; gene therapy; immune system.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
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DB; ADP25140.
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Best Local S
Matches 47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 188 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                               182
                                                                                                                                                                                          129 DFYWIGL---RDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGL----HASSCEVALQW 181
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Sequence 8, Appli Sequence 111, App Sequence 111, App Sequence 116, Appli Sequence 232, App Sequence 232, App Sequence 20399, A Sequence 37708, A Sequence 52925, A Sequence 168, Appli Sequence 17, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 21825, A Sequence 29853, A Sequence 29853, A Sequence 29853, A Sequence 29853, A Sequence 27, Appli

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Total number of hits satisfying chosen parameters:
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score greater than or equal to the score of the result being pr
and is derived by analysis of the total score distribution.
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1 MTDSVIYSMLELPTATQAQN......GLQASSCEVPLHGVCKKVRL 189
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Copyright (c) 1993 - 2006 Compugen Ltd
US-08-722-126A-5
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US-08-486-715-5
US-08-486-719-5
US-08-476-7100-5
US-08-475-749-5
US-08-475-749-5
US-09-286-352-7291
US-09-123-443-14
US-09-558-089-14
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US-09-79-757-0228-32
US-09-79-757-0228-32
US-09-206-935-19
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19,                                                                             ; TYPE: amino a
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US-08-722-126A-5
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US-08-722-126A-5
                                                                                                                                            TELEPHONE: (202) 628-5197
TELEPAX: (202) 737-3528
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5, Application US/08722126A
Patent No. 6034227
GENERAL INFORMATION:
APPLICANT: BECHT, Israel
APPLICANT: GUTHMANN, Marcelo D.
APPLICANT: TAL, Michael
                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/722,126A
FILING DATE: 08-OCT-1996
CLASSIFICATION: 53.6
PRIOR APPLICATION DATA:
APPLICATION UMBER: PCT/US95/04258
FILING DATE: 06-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: IL 109257
FILING DATE: 06-APR-1995
PRIOR APPLICATION NUMBER: IL 109257
FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 25.618
REGISTRATION NUMBER: PECHT=1A
REFERENCE/DOCKET NUMBER: PECHT=1A
TELECOMMUNICATION INFORMATION:
     Query Match
Best Local Similarity
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APPLICANT: TAL, Michael
TITLE OF INVENTION: A DNA MOLECULE ENCODING A MAST CELL
TITLE OF INVENTION: FUNCTION-ASSOCIATED ANTIGEN (MAFA)
MUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS: BROWDY AND NEIMARK, P.L.L.C.
STREET: 419 Seventh Street N.W., Ste. 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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US-09-451-527-111
US-09-451-527-111
US-09-198-452A-1169
US-09-198-452A-2132
US-08-026-758-16
US-09-252-991A-20399
US-09-270-767-37708
US-09-270-767-32925
US-09-451-527-168
US-09-451-527-168
US-09-4817-792-7
US-09-487-792-7
US-09-487-792-7
US-09-1487-792-7
US-09-1487-7
US-09-152-991A-29853
US-09-252-991A-29853
US-09-252-991A-29853
          Score 525.5; DB 2; Pred. No. 1.7e-48;
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                                                                                                                                                                                           ; MOLECULE TYPE: protein PCT-US95-04258-5
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                                                                                                                               Query Match 51.4%; So Best Local Similarity 53.5%; Properties 100; Conservative 29;
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                TELEX: 248633
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W.,
                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: PE
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          PRICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC POOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/04258
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TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                   NAME: BROWDY, ROGER L
REGISTRATION NUMBER: 2
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                                                                                                                                                                                                                                                LENGTH: 188 amino acids
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                                                                                                                                                                                                                                  amino acid
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                CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
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08-APR-1994
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                                                                                                                               Score 525.5; DB 4;
Pred. No. 1.7e-48;
29; Mismatches 57;
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                                                                                                                                                            DB 4;
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                                                                                                                                                            Length 188;
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Sequence 5, Application US/08486
PATENT NO. 5674736
GENERAL INFORMATION:
APPLICANT: Miller, Samuel I.
TITLE OF INVENTION: SALMONEL
NUMBER OF SEQUENCES: 5
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US-08-486-715-5
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US-08-486-715-5
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Patent No. 5674724
                                                                   Matches
                                                                                                      Query Match
                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 07/629,602
FILING DATE: 18-DEC-1990
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                             TELEFAX: (617) 542-890
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Miller
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/090,526 FILING DATE: 09-JUL-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PS/2 Model 50Z or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.
                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/01 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55S:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Miller, Samuel I.
TITLE OF INVENTION: SALMONELLA VIRULENCE GENES
                                                                                                                                                                                                                                                                                 TELEPHONE: (617) 542-8906
                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Fign & ....
STREET: 225 Franklin Street
                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                              TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
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                                138 NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGL 171
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                                                                     14;
                                                                                       Similarity
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LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
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                                                                     Conservative
                                                                                                                                                                       linear
                                                                                                                                                         protein
                                                                                                                                                                                         not relevant
                                                                                     5.4%;
36.8%;
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                                                                                     Score 55;
Pred. No.
                                                                   Mismatches
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                                                                                       6.4e+02;
                                                                                                       DB 1;
                                                                                                      Length 188;
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                                                                     Gaps
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SALMONELLA VIRULENCE GENES

US/08486719

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PRIOR APPLICATION UNMBER: 08/090,526
APPLICATION NUMBER: 08/090,526
FILING DATE: 09-JUL-1993
PRIOR APPLICATION UNMBER: 07/629,602
APPLICATION NUMBER: 07/629,602
FILING DATE: 18-DEC-1990
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REGISTRATION NUMBER: 30,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.4%;
Best Local Similarity 36.8%;
Matches 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PS/2 Model 502 or 558X OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
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ADDRESSEE: Fish & Richardson P.
                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                 APPLICANT: Miller, Samuel I., III
APPLICANT: Mekalanos, John J.
TITLE OF INVENTION: SALMONELLA VIRULENCE GENES
                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P. C.
                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
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TELEFAX: 200154
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TYPE: amino acid
STRANDEDNESS: not relevi
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FILING DATE: 07-JUN-1995
              APPLICATION NUMBER: US/08/476,100 FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                    CITY: Boston
                                                                                                                                                                                                                                                       STREET:
CLASSIFICATION:
                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   138 NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGL 171
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Pred. No. 6.4e+02;
9; Mismatches
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TELEFAX: (01.
TELEFAX: (0221 STRE ...
TELEX: 200221 STRE ...
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
TVPE: amino acid
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Best Local S
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TELEX: 200154
INFORMATION FOR SEQ ID NO: 5:
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REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 0078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/09/
FILING DATE: 09-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/62:
FILING DATE: 18-DEC-1990
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ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/286,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SALMONBLLA VECTORS ENCODING TRUNCATED TITLE OF INVENTION: PAGE FUSION PROTEIN, METHOD OF MAKING,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 130 W
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                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                        NAME: Resnick, David S
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 05-AUG-
CLASSIFICATION: 424
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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Similarity 36.8%; Pred. No. 6.4e+02;
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                                                                                                                                                                                                                                                        (617) 523-6400
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Miller, Samuel I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RONALD I. EISENSTEIN; DIKE, BRONSTEIN, ROBERTS & CUSHMAN
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RESULT 8
US-10-104-047-2380
; Sequence 2380, Application US/10104047
; Patent No. 6943241
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Best Local Similarity 36.8
Matches 14; Conservative
                                                                                                                                                                                                 Query Match
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Patent No. (
                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/475,74
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/090,526
FILING DATE: 09-JUL-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/629,602
FILING DATE: 18-DEC-1990
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                           TELEX: 200154
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                           NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 0078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                  TOPOLOGY: 1:
MOLECULE TYPE:
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LENGTH: 188 amino acid
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 558X
OPERATING SYSTEM: MS-DOS (Version 5.0)
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                               STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                               TYPE:
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                                                                                                                                 138 NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGL 171
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                                                                                                                                                                                                                                                                                              amino acid
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                                                                                                                                                                                36.8%;
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                                                                                                                                                                 9; Mismatches
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Pred. No. 6.4e+02;
                                                                                                                                                                                Score 55; DB 2;
Pred. No. 6.4e+02;
                                                                                                                                                                                                 DB 2; Length 188;
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RESULT 10
US-09-122-443-14
; Sequence 14, Application US/09122443
; Sequence 10. 6060284
; Patent NO. 6060284
; GENERAL INFORMATION:
   APPLICANT: Bazan, J. Fernando
   TITLE OF INVENTION: MAMMALIAN CYTOKINE; RELATED REAGENTS
   NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
   ADDRESSE: DNAX Research Institute
STREET: 901 California Avenue
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Acinetobacter baumannii US-09-328-352-7291
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PATENT NO. 6562958

GENERAL INFORMATION:
APPLICANT: GATY L. Breton et al.
APPLICANT: GATY L. Breton et al.
APPLICANT: GATY L. Breton et al.
APPLICANT: GATY L. BY AND AND AND AND SEQUENCES RELATING TO ACINETOBACTER TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER FILE REPERENCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 7291
LENGTH: 188
TYPE: DET
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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2380
LENGTH: 188
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TITLE OF INVENTION: No. 6943241e1 full length cDNA
FILE REFERENCE: HI-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: PRIOR PPLICATION NUMBER: PRIOR PPLICATION NUMBER: PRIOR PPLICATION NUMBER: PRIOR PPLICATION NUMBER: PRIOR PILING DATE: PRIOR FILING DATE: PRIOR FILING DATE: PRIOR FILING DATE: PRIOR PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING PILING 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100 LEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRN 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51 LSVLLYQWILCQG------SNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCL 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28 LSYCLAMLDHLEQFLPNKEPSSIONF---PFFWISOVN
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15; Conserv
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39.5%;
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Pred. No. 7.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 53.5; DB 2; Pred. No. 9.3e+02;
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STRANDEDNESS: not rel
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-122-443-14
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                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14, Application US/09558089 Patent No. 6479634 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (650)496-1200 INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/122,443

FILING DATE: 24-JUL-1998

CLASSIFICATION: 436

PRIOR APPLICATION DATA:

OPERATOR OPERATOR OF THE PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 60/053,765
FILING DATE: 25-JUU-1997
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0758K1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
          ZIP: 94304-1104
ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/558,089
FILING DATE: 25-Apr-2000
CLASSIFICATION: duknown
PRIOR APPLICATION: duknown
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 94304-11
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                     REFLICANT: BAZAN, J. FERNANDO
TITLE OF INVENTION: MAMMALIAN CYTOKINE; RELATED REAGENTS
NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    150 LLTDKLESQKEW 161
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l Similarity 20.5%;
27; Conservative 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -PDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS-----LLQVFLSEA 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLITHVLWEIVEMRKELCNGNSDCMNNDDALAENNLKLPEIQRNDGCYQTGYNQEICLLK 89
                                                                                                                                                                                                                                                                ADDRESSEE: DNAX Research Institute
STREET: 901 California Avenue
CITY: Palo Alto
                                                                                                                                                                                                                                                 STATE: California
APPLICATION NUMBER: 09/122,443
                                                                                                                                                                                                                               COUNTRY: USA
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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ches 54;
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US-09-558-087-14
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Best Local Similarity
                                    INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150 LLTDKĹESQKEW 161
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INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: (650)852-9196
TELEFAX: (650)496-1200
                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
                                                                        STRANDEDNESS: not relevant
                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                         FILING DATE: <Unknown>
                                                                                                                    LENGTH: 188 amino acids
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130 FCWIGLRNNSGW 141 30 GLITHVLWEIVEMRKELCNGNSDCMNNDDALAENNLKLPEIQRNDGCYQTGYNQEICLLK 44 GLLTAVLLSVLLYQWILCQGSN-------YSTCASCPSC---90 ISSGLLEYHSYLEYMKNILKDNKKDKARVLQRDTETLIHIFNQEVKDLHKIVLPTPISNA 76 -PDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS-----LLQVFLSEA 129 Conservative 5.1%; Score 52; 20.5%; Pred. No. 17; Mismatches 1.4e+03; DB 2; 54; Indels Length 188 34; Gaps 89 75

Sequence 14, Application US/09558087
Patent No. 6495667
GENERAL INFORMATION: APPLICANT: Bazan, J. Fernando TITLE OF INVENTION: MAMMALIAN CYTOKINE; RELATED REAGENTS CORRESPONDENCE ADDRESS: NUMBER OF SEQUENCES:

ZIP: 94304-1104 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk CITY: Palo Alto STATE: California COUNTRY: USA COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS STREET: 901 California Avenue RESSEE: DNAX Research Institute

SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/558,087
FILING DATE: 25-Apr-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/053,765
RILING DATE: 25-UTL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0758K1
TELECOMMUNICATION INFORMATION: TELEFAX: (650)496-1200 TELEPHONE: (650)852-9196

ENGTH: 188 amino acids

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MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-558-087-14
                                                                                                                            ; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-558-474-14
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Patent No. 6835825
GENERAL INFORMATION:
                                                    Query Match
Best Local Similarity
Matches 27; Conserv
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Best Local Similarity
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                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/053,765
EILING DATE: 25-UL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0758K1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/09/558,474
PILING DATE: 25-Apr-2000
CLASSIFICATION: Unknown>
                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (650)852-9196
TELEFAX: (650)496-1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: DNAX Research Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: MAMMALIAN CYTOKINE; RELATED REAGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Bazan, J. Fernando
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44 GLLTAVLLSVLLYQWILCQGSN---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30 GLITHVLWEIVEMRKELCNGNSDCMNNDDALAENNLKLPEIQRNDGCYQTGYNQEICLLK 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44 GLLTAVILSVLLYQWILCQGSN-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISSGLLEYHSYLEYMKNNLKDNKKDKARVLQRDTETLIHIFNQEVKDLHKIVLPTPISNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 901 California Avenue
CITY: Palo Alto
STATE: California
                                                                                                                                                                                                    STRANDEDNESS: not relevant
                                                                                                                                                                                                                     LENGTH: 188 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94304-1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: not
                                                                                                                                                                                   TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09558474
                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.1%; Score 52;
20.5%; Pred. No.
                                                                     5.1%; Score 52;
20.5%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17; Mismatches
                                                    17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          relevant
                                                        Mismatches
                                                                                            DB 2;
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                                                                       .4e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----YSTCASCPSC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54; Indels
                                                                                          Length 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 188
                                                      Indels 34; Gaps
   ---YSTCASCPSC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         34;
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US-09-543-681A-7232
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US-09-123-492A-1
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                                                                                                                          US-09-543-681A-7232
                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: GARY BRETON
APPLICANT: GARY BRETON
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.1002-001
CURRENT APPLICATION NUMBER: US/09/543,681A
CURRENT FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 60/128,706
PRIOR APPLICATION NUMBER: US 60/128,706
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344
                                                                                                                                         SEQ ID NO 7232
LENGTH: 188
TYPE: PRT
ORGANISM: Proteus mirabilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver.
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7232, Application US/09543681A Patent No. 6605709
                                          Matches
                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application Patent No. 6197940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/99/123,492A CURRENT FILING DATE: 1998-07-28 PRIOR APPLICATION NUMBER: 08/593,677 PRIOR FILING DATE: 1997-01-29 PRIOR APPLICATION NUMBER: PCT/US97/01725 PRIOR APPLICATION NUMBER: 60/082,753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: KLINEFEI TITLE OF INVENTION: FILE REFERENCE: KL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Human DJ-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 189
                                     Local Similarity nes 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        156 RGPGTSFEFALA 167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44 GLLTAVLL--SVLLYQWILCQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDW-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97 --- NSSLEFCLA 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30 GLITHVLWEIVEMRKELCNGNSDCMNNDDALAENNLKLPEIQRNDGCYQTGYNQEICLLK 89
15 ATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWILCQGSNYSTC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLIAAICAGPTALLAHEIGC-GSKVTT---HPLAKDKWMNGGHYTYSENRVEKDGLILTS 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FCWIGLRNNSGW 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISSGLLEYHSYLEYMKUNLKDNKKDKARVLQRDTETLIHIFNQEVKDLHKIVLPTPISNA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -PDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS-----LLQVFLSEA 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KLINEFELTER, Gary
TENTION: METHOD FOR EVALUATING AND AFFECTING MALE FERTILITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KLINEFELTER=1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.1%;
31.9%;
                                        4.9%; Score 50.5; DB 2;
21.0%; Pred. No. 2e+03;
cive 16; Mismatches 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/09123492A
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Pred. No. 1.4e+03;
9; Mismatches 26
                                          56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 189;
                                                                                Length 188;
                                          Indels 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14;
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
    69
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Search Job ti	Ф	Ş	망	Ş	Db
Search completed: January 9, 2006, 15:37:59 Job time : 26.423 secs	155 HYPLLMEKRSSQGVRLVCASKLC 177	109 HLLVITDNQEMSLLQVFLSEAFC 131	100 IDKPDETVIHCPOCEKGKLLQRKSRFGKIFYACNQYPECQFVLNNKPINGECEYC 154	70ASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDS 108	::

This Pago Pion's Arms

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Minimum DB
Maximum DB
 Result
 Post-processing: Minimum Match
Maximum Match
Listing first
 OM protein
 Scoring table:
 Sequence:
 Title:
 Run on:
 Total number of hits satisfying chosen parameters:
 Searched:
 Perfect score:
 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
Score
 ٠
 seq length: 188 seq length: 189
 protein search, using sw model
 BLOSUM62
Gapop 10.0 , Gapext 0.5
 A_Geneseq_21:*
1: geneseqp198
 1 MTDSVIYSMLELPTATQAQN....
 US-09-811-367B-1
1023
 January
 Match
 2443163 seqs, 439378781 residues
 Query
 GenCore version 5.1.6 Copyright (c) 1993 - 2006 Compugen Ltd.
 geneseqp1980s:*
geneseqp1990s:*
geneseqp2000s:*
geneseqp2001s:*
geneseqp2003as:*
geneseqp2003bs:*
geneseqp2003bs:*
 geneseqp2005s:*
 Length
 9, 2006, 14:41:26;
 DB
 80
 100%
45 summaries
 AAW88265
AAE11759
ADD25635
ADY19892
AAE11760
AAR77033
AAW88277
AAE11761
AEA89021
AAU19837
AAB17910
ABP17910
ABP65310
AAW78675
AAU056531
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AAU065310
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 SUMMARIES
 ; Search time 87.977 Seconds (without alignments) 943.913 Million cell updates/sec
 .GLQASSCEVPLHGVCKKVRL
 6014
 Aau00671
Abo32533
Adp65310
 Aau19837
Abb17910
Abp48057
Adc11019
Aam78675
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Aae11760
 Aae11759
Add25635
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 Adc38690
 Aea89021
 Aae11761
 Aaw88277
 Aar77033
 Aaw88265
 7 Rat mast
1 Rat mast
1 Chicken M
7 Human nov
7 Human pro
7 Human pro
9 Human pro
1 Human pro
1 Human pro
1 Human pro
1 Human pro
1 Human c-t
4 Human c-t
4 Human pol
1 PRO polyp
6 Drosophil
1 PRO polyp
7 Human gec
8 Bacterial
 Human mas
Human mas
Binding d
PRO polyp
Mouse mas
Mammalian
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| 45        | 44        | 43       | 42       | 41       | 40       | 39        | 38        | 37        | 36        | 35        | 34        | 33        | 32       | 31        | 30        | 29       | 28        | 27        | 26        | 25        |
|-----------|-----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|
| 52        | 52        | 52       | 52.5     | 53       | 53.5     | 53.5      | 54.5      | 54.5      | 55        | ភភ        | 55        | 55        | 55       | 55        | 55.5      | 57       | 57        | 59        | 59        | 66.5      |
| 5.1       | 5.1       | 5.1      |          |          | 5.2      |           |           |           |           |           | 5.4       | 5.4       | 5.4      | 5.4       | •         | •        | 5.6       |           |           | 6.5       |
| 188       | 188       | 188      | 188      | 188      | 189      | 188       | 188       | 188       | 189       | 188       | 188       | 188       | 188      | 188       | 189       | 189      | 189       | 188       | 188       | 189       |
| 9         | ø         | N        | œ        | N        | ω        | σ         | 7         | w         | 0         | 0         | N         | N         | N        | N         | œ         | 8        | œ         | w         | ω         | ഗ         |
| AEB47343  | ADV98163  | AAW95013 | ADY24659 | AAR63865 | AAG33435 | ADA36004  | ADB64226  | AAG35627  | ABP58704  | ABP98198  | AAW18380  | AAR70744  | AAR25674 | AAR26415  | ADR10104  | ADX67118 | ADX77191  | AAG05661  | AAG60460  | ABP06929  |
| Aeb47343  | Adv98163  | Aaw95013 | Ady24659 | Aar63865 | Aag33435 | Ada36004  | Adb64226  | Aag35627  | Abp58704  | Abp98198  | Aaw18380  | Aar70744  |          | -         |           | Adx67118 |           |           |           | Abp06929  |
| Mouse int | Mouse int |          |          |          | Q)       | Acinecoba | Human pro | Arabidops | Human sod | Amino aci | S. сурила | Page proc |          | page/AP I | Human pro |          | Plant rul | Arabidops | Arabidops | Human ORF |

## ALIGNMENTS

AAW88265 standard; protein; 189

B

Human mast cell function-associated antigen (MAFA)

29-MAR-1999 AAW88265;

(first entry)

```
RRESULT 1
AAW8825
ID AAW8825
AC AAW8
AC AAW8
AC AAW8
DT 29-N
XX Mast
KW Mast
KW Mast
KW Mast
KW Modi
FT Modi
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 Mast cell function-associated antigen; MAFA; splice variant; human; inflammation; allergy; asthma; rheumatoid arthritis; tumour; therapy.
 New polypeptide having a sequence corresponding function-associated antigen - useful in forming pharmaceutical compositions in the treatment of diseases, and tumour growth.
 WPI; 1999-059806/05.
N-PSDB; AAV84198.
 Homo sapiens.
 Hewitt EL,
 29-MAY-1998;
 03-DEC-1998.
 Modified-site
 Modified-site
 Modified-site
 Modified-site
 Peptide
 31-MAY-1997;
 WO9854209-A2
 (PEPT-) PEPTIDE THERAPEUTICS LTD
 Lamers MBAC,
 97GB-00011148
 98WO-GB001572
 /note= "Asn is N-glycosylated"
97. 99
/note= "Asn is N-glycosylated"
137. 139
 /note= "ITIM motif"
65. .67
 Location/Qualifiers
 /note=
 /note= "Asn is N-glycosylated"
150. .152
 "Asn is N-glycosylated"
 Lamont A,
 Williams DH,
 to human mast cell
and manufacturing
inflammatory and allergic
```

Drosophi:

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ARESULT 2
AAE11759
ID AAE11
XX AAE1
XX AAE1
XX Huma
XX Huma
XX Huma
XX Huma
XX Homo
OX Homo
OX Homo
YX WAFFA
XX 16-M
PR 17-M
YX (GEM
XX WAFFA
PR 17-M
PR WPI;
DR WPI;
DR WPI;
DR WPI;
DR WPI;
DR WPI;
PF Phaz
PF Phaz
PF Phaz
PS Clai
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 Query Match
Best Local
 Matches
 antigen (MAFA), a type II membrane glycoprotein. cDNA (see AAV84198) encoding human MAFA can be obtained from myelogenous leukaemic cell line KU812 or cDNA derived from human lung tissue. The encoded protein is similar to the rat form (see AAW88277) having an intracellular domain containing a putative immunoreceptor tyrosine activation motif (ITIM) and an extracellular lectin-like domain. 2 Alternatively spliced forms (see AAW88256-67) of human MAFA have been identified. Polypeptides and synthetic peptides (see AAW88258-64) based on these truncated MAFA proteins can be used in methods for the treatment of inflammatory and
Claim 10; Page 18; 49pp; English
 Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bind to mast cell function-associated antigen ligand on target cell.
 Takahashi N,
 16-MAR-2001; 2001WO-US008596.
 WO200170805-A2
 Human; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
 Human mast
 18-DEC-2001
 AAE11759 standard;
 Sequence 189 AA;
 allergic diseases,
 Disclosure;
 Thie
 (GEMI-) GEMINI SCI INC.
 is the amino acid sequence of human mast cell function-
gen (MAFA), a type II membrane glycoprotein. cDNA (see A/
 2001-611482/70.
 181
 181
 121
 121
 189;
 13
 61
 μ
 ب
 AAD18734.
 Similarity
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 HGVCKKVRL 189
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
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 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
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 HGVCKKVRL
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 cell function associated antigen (MAFA) protein.
 Fig
 Conservative
 2000US-0190716P
 Mikayama
 (first entry)
 ۲.
 er cell; NK; cytostatic.
 protein;
 and tumour growth
 44pp; English.
 100.0%;
 189
 0
 Score 1023; DB 2;
Pred. No. 2.7e-98;
; Mismatches 0;
 ₿
 Length
 Indels
 0
 associated
 Gaps
 binds
 180
 120
 120
 60
 60
 0
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RRESULT 3
ADD25635
ADD25635
AC ADD2
XX ADD2
XX ADD2
XX Bind
XX Bind
XX Bind
XX Bind
XX CH1
KW CH1
KW CH1
KW Theu
KW Theu
KW Theu
KW Theu
KW US20
XX US20
XX US30
PN 17-J
PR 17-J
PR 17-J
PR 17-J
PR 17-J
PR 17-J
PR 17-J
PR 17-J
PR 17-J
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 The present invention relates to a pharmaceutical composition comprising CC an agent which specifically binds to a mast cell function associated CC antigen (MAFA) ligand on a target cell, and prevents or inhibits natural CC killer (NK) - or T-cell-expressed cell surface MAFA from binding to MAFA CI ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA CC binding to a ligand on a target cell, by contacting the pharmaceutical CC composition in vitro, ex vivo or in vivo by administering the composition CC to the subject, to NK or T-cell or the target cell e.g. tumour cell, in CC an amount sufficient to inhibit cell surface MAFA binding to the ligand CC unnour sufficient to inhibit cell surface MAFA binding to the ligand CC tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic CC T-cell (CTL), where the tumour comprises an NK cell or CTL-susceptible cumour cell. The invention is also useful for inhibiting an activity of CC NK cell or a T-cell. The present sequence is human MAFA protein
 Matches
 Query Match
Best Local Similarity
 Binding domain; immunoglobulin; fusion protein; cytostatic; antiatrhritic; immunosuppressive; antidiabetic; antityroid; neuroprotective; hinge region; immunoglobulin heavy chain; CH2 constant region; CH3 constant region; IgG1; antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation; malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma; rheumatoid arthritis; myasthenia gravis; Grave's disease; type I diabetes mellitus; multiple sclerosis; autoimmune disease.
 17-JAN-2001;
17-JAN-2002;
 Binding domain-immunoglobulin fusion protein-associated protein
 Sequence
 25-JUL-2002;
 26-JUN-2003
 US2003118592-A1
 15-JAN-2004
 ADD25635
 181
 181
 121
 121
 189;
 61
 61
 \vdash
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 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 189
 standard; protein; 189
 HGVCKKVRL
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 HGVCKKVRL
 Conservative
 2001US-0367358P.
2002US-00053530.
2002US-0385691P.
 Α,
 2002US-00207655
 (first entry)
 189
 100.0%;
 0
 Score 1023; DB 4;
Pred. No. 2.7e-98;
; Mismatches 0;
 Indels
 Length
 0;
 Сарв
 180
 120
 180
 120
 60
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(GENE-) GENECRAFT INC

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CC comprising a binding domain polypeptide that is fused to an immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain CC immunoglobulin hinge region polypeptide that is fused to the hinge region CC Plz constrant region polypeptide that is fused to the hinge region CC polypeptide, and an immunoglobulin heavy chain CC chinge region polypeptide comparises; a wild-type human IgG1 immunoglobulin hinge region polypeptide, a mutated human IgG1 immunoglobulin hinge region polypeptide, a mutated human IgG1 immunoglobulin hinge region polypeptide, a mutated human IgG1 immunoglobulin hinge region polypeptide. The hinding region polypeptide contains 2 cysteine residues, where the first cysteine is not mutated; a mutated human IgG1 immunoglobulin hinge region polypeptide. (a) having 3 or more cysteine residues, where the first cysteine is not mutated; a mutated human IgG1 immunoglobulin hinge region polypeptide. (a) having 3 or more cysteine residues, where the mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where cysteine residues; where cysteine residues; where cysteine residues; made a mutated human IgG1 immunoglobulin fusion protein is capable of at least one immunoglobulin hinge region polypeptide contains no cysteine residues. The binding domain-immunoglobulin fusion protein is capable of specifically binding to an antigen. Also included are an isolated polymuclectide encoding the chinding domain polypeptide is capable of specifically binding to an antigen. Also included are an isolated polymuclectide encoding the construct comprising the binding domain-immunoglobulin fusion protein, a protein, a protein or polymuclectide and a carrier, and treating a subject fusion protein as uncome, carriers and treating a subject of the sequence of having a malignant condition or a B-cell disorder. The binding domain-immunoglobulin fusion protein, a B-cell disorder, e.g. melanoma, carrinnam or sarcoma, rheumaroglobulin protein or a B-cell disorder. Imm
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 Query Match
Best Local Similarity
 Matches
 Disclosure; SEQ ID NO 196; 157pp; English
 New binding domain-immunoglobulin fusion protein, useful for treating a subject having or suspected of having a malignant condition or a B-cell disorder, e.g. melanoma, Grave's disease or autoimmune disease.
 Sequence 189
 number therefore none of the sequences can be explicitly identified
 181
 181
 121
 121
 186;
 61
 61
 _
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 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL 60
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS 120
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
 HGVCKKVRL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL 180
 Conservative
 ₽
 Hayden-Ledbetter MS,
 189
 98.4%;
 1;
 Score 1007; DB 7;
Pred. No. 1.3e-96;
1; Mismatches 2;
 Thompson
 2
 Length 189;
 Indels
 0
 Gaps
 120
 60
 RESULT 5
AAE11760
AXE
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AAE11760

AAE11760 standard; protein; 188 AA.

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 Matches
 Query Match
Best Local :
 ADY19892 standard;
 polypeptide. The polypeptide, agonist or an antagonist, antibody composition, and method are useful for diagnosing and treating related disorder, e.g. systemic lupus erythematosus, rheumatoid
 New nucleic acid encoding PRO polypeptide, useful for diagnosing and treating an immune related disorder, e.g. systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus.
 05-MAY-2005
 Sequence 189
 Claim
 WPI; 2005-182330/19.
 11-AUG-2003; 2003US-0493546P
 11-AUG-2004; 2004WO-US026249
 Homo sapiens
 Antiallergic;
 Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic:
 Antirheumatic; Antiarthritic; Osteopathic; Antithyroid; Antidiabetic; Nephrotropic; C
 Antiinflammatory;
 PRO polypeptide
 The invention relates to an isolated nucleic
 Abbas
 121
 186;
181
 181
 121
 8; SEQ ID NO 5698; 158pp; English.
 61
 61
 μ
 Similarity
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 COGSNYSTCASCPSCPDRWMKYGNHCYYPSVEEKDWNSSLEFCLARDSHLLVITDNOEMS
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
 MIDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 Clark H,
 HGVCKKVRL 189
 HWVCKKVRL
 The present
 Conservative
 A,
 (first entry
 diagnosis.
 SEQ
 Immune
 protein; 189 AA
 Ouyang
 ID NO
 98.4%;
 sequence represents
 disorder;
 5698
 Ę.
 Score 1007;
Pred. No. 1
 Williams
 Mismatches
 Dermatological;
 ď,
 CNS-Gen.; Hepatotropic;
 .3e-96;
 BB
 Hemostatic; Antianemic;
 Wood
 9
 acid encoding
 PRO
 polypeptide
 Length 189;
 Indels
 Ξ,
 Immunosuppressive;
 ٣
 ij
 0
 PRO
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 immune
 180
 120
 60
 120
 0
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 Query Match
Best Local :
 an agent which specifically binds to a mast cell function associated antigen (MAFA) ligand on a target cell, and prevents or inhibits natural killer (NK) - or T-cell-expressed cell surface MAFA from binding to MAFA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA binding to a ligand on a target cell, by contacting the pharmaceutical composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in an amount sufficient to inhibit cell surface MAFA binding to the ligand on the target cell. The agent or the composition is useful for treating a tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell or a cytotoxic cumour cell. The invention is also useful for inhibiting an activity of NK cell or a T-cell. The present sequence is mouse MAFA protein
 Key
Domain
 Sequence 188 AA;
 Example 1; Page 19; 49pp; English.
 Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bind to mast cell function-associated antigen ligand on target cell.
 17-MAR-2000; 2000US-0190716P
 16-MAR-2001; 2001WO-US008596
 мив вр
 Mouse; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
 18-DEC-2001
 WO200170805-A2
 present invention relates to a pharmaceutical composition comprising
 2001-611482/70.
180
 181
 121
 121
 61
 61
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 Similarity
 GEMINI SCI INC
QWICKKV 186
 HGVCKKV 187
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSL-RILTNSLIORCGAIHRNGLQASSCEVAL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 MADSSIYSTLELPEAPOVODESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 z
 Conservative
 Mikayama
 (first entry)
 function
 Location/Qualifiers 64. .188
 er cell; NK; cytostatic.
 53.6%;
 Η.
 "Extracellular domain"
 associated antigen (MAFA)
 26;
 Score 548.5; Pred. No. 1e-4
Pred Mismatches
 1e-48;
 DB 4;
 56;
 Length
 Indels
 protein
 188;
 1:
 Gaps
 179
 120
 180
 60
 60
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RESULT 7
AAW88277
ID AAW8
XX
AC AAW8
 RESULT 6
AAR77033
ID AAR77733
ID AAR77733
ID AAR77033
ID AAR77
XX 01-F
XX 01-F
XX Wast
KW Wast
KW Widen
XX WO95
XX WO95
XX WO95
XX WO95
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XX WO95
XX WO95
XX WO95
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 Matches
 Query Match
Best Local
 A soluble form of mast cell function-associated antigen (MAFA) can be produced by recombinant techniques for use in the ligand- screening assay. The ligands that are identified may be used alone or in combination with the MAFA to prevent inflammatory and allergic reactions
 Novel DNA encoding a mast cell function-associated antigen (MAFA) - useful for screening for ligands of MAFA which are useful for prevention of inflammatory and allergic reactions.
 AAW88277;
 AAW88277
 Sequence 188 AA;
 Claim
 WPI; 1995-366356/47
N-PSDB; AAT01471.
 08-APR-1994;
 06-APR-1995;
 Rattus rattus
 Mast cell function-associated antigen; MAFA; soluble; ligand; identification; screening; inflammation; inflammatory; allergy; allergic;
 01-FEB-1996
 AAR77033 standard; protein; 188
 Pecht I,
 (YEDA)
(RYCU/)
 19-OCT-1995
 W09527734-A1.
 Mammalian mast
 121
 121
 100;
 12; Page 37; 54pp; English.
 61
 61
 Н
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 Similarity
 YEDA RES & DEV CO LTD RYCUS A.
 standard; protein; 188
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 QWICEKV 186
 HGVCKKV 187
 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 Guthmann
 Conservative
 (first
 94IL-00109257.
 95WO-US004258.
 Ğ,
 entry.
 function-associated antigen
 51.4%;
 29;
 Score 525.5; DB 2
Pred. No. 2.5e-46;
9; Mismatches 57
 DB 2;
 57;
 (MAFA)
 Indels
 Length
 ۲.
 Gaps
 180
 120
 120
 60
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RESULT 8
AAE11761
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 Query Match
Best Local
 Matches
 Rat
 This is the amino acid sequence of rat mast cell function-associated antigen (MAPA), a type II membrane glycoprotein found on mast cells and basephils. The invention relates to cloning of the human MAFA molecule (see AAM88265) and to the discovery of splice variants (see AAM88266-67) of human MAFA that are not found in rat. Polypeptides and synthetic peptides (see AAW88258-64) based on human MAFA and human truncated MAFA, and polynucleotides encoding them, can be used in methods for the treatment of inflammatory and allergic diseases (e.g. rheumatoid arthritis and asthma), and tumour growth
 Key
Modified-site
 Mast cell fun inflammation;
 29-MAR-1999
 Modified-site
 Disclosure;
 New polypeptide having a sequence corresponding to human mast cell function-associated antigen - useful in forming and manufacturing pharmaceutical compositions in the treatment of inflammatory and allergic
 WO9854209-A2
 Sequence 188 AA;
 29-MAY-1998;
 (PEPT-) PEPTIDE
 mast cell
 cell
 180
 181
 121
 121
 100;
 EL,
 13
 13
 ۲
 1 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 Similarity
 AAV84222
 HGVCKKV
 LLOVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 QWICEKY
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 and tumour growth.
 function-associated antigen; MAFA;
 Fig 4; 44pp; English.
 Lamers MBAC,
 Conservative
 (first
 function-associated antigen (MAFA)
 allergy; asthma; rheumatoid
 97GB-00011148
 98WO-GB001572
 THERAPEUTICS LTD
 Location/Qualifiers 82. .84
 /note= "Asn is N-glycosylated"
 note=
 186
 187
 entry)
 51.4%;
 GLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
 "Asn is N-glycosylated"
 Lamont A,
 29;
 Score 525.5;
Pred. No. 2.9
 Mismatches
 Williams DH;
 .5e-46;
 arthritis;
 DB 2;
 splice variant;
thritis; tumour;
 Length 188;
 Indels
 1;
 rat;
therapy.
 Gaps
 180
 120
 179
 120
 60
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 The present invention relates to a pharmaceutical composition comprising CC an agent which specifically binds to a mast cell function associated CC antigen (MAFA) ligand on a target cell, and prevents or inhibits natural CC killer (NK)- or T-cell-expressed cell surface MAFA from binding to MAFA CC useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA from binding to a ligand on a target cell, by contacting the pharmaceutical CC composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in CC an amount sufficient to inhibit cell surface MAFA binding to the ligand CC on the target cell. The agent or the composition is useful for treating a CC tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell- or CTL-susceptible cumour cell. The invention is also useful for inhibiting an activity of
 Query Match
Best Local
 Matches
 Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that binds to mast cell function-associated antigen ligand on target cell.
 Rattus norvegicus.
 Rat; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
 Rat mast
 AAE11761 standard; protein; 188
 Example 1; Page 19; 49pp; English.
 Takahashi N,
 17-MAR-2000; 2000US-0190716P.
 16-MAR-2001; 2001WO-US008596
 WO200170805-A2
 Sequence 188
 immunosuppressive; cytostatic.
 (GEMI-) GEMINI SCI
 181 HGVCKKV 187
 61
 13
 O
F
 AAD18736.
 Similarity
 cell
 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFFDNQGVN
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 þ
 Conservative
 A
A
 T-cell. The present sequence is rat MAFA protein
 (first entry)
 Mikayama
 function associated antigen (MAFA) protein
 51.4%;
 Η
 Score 525.5; DB 4;
Pred. No. 2.5e-46;
9; Mismatches 57;
 Indels
 Length
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 180
 120
 120
 60
 60
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180 QWICEKV

186

04-DEC-2001

(first entry)

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RESULT 9
AEA89021
 RESULT 10
AAU19837
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 Query Match
Best Local :
 Matches
 The present invention relates to a method of producing transgenic animal having modified resistance to a disease. The method involves introducing retrovirus having polynucleotide sequence encoding protein that modifies disease resistance of animal, into cell of animal. The invention is useful for screening proteins capable of modifying resistance of an animal to a disease, for producing transgenic bird and fish and also useful in gene therapy. The present sequence is the chicken major histocompatibility complex (MHC) C-type lectin receptor, B-lec protein. This sequence is used to produce a transgenic animal having modified
AAU19837;
 AAU19837
 Sequence 188 AA;
 Disclosure;
 Producing transgenic animal having modified resistance to disease, introducing retrovirus having polynucleotide sequence encoding prothat modifies disease resistance of animal, into cell of animal.
 WO2005054280-A2
 Gallus gallus.
 Transgenic animal; disease-resistance; gene therapy lectin; major histocompatibility complex; receptor.
 Chicken MHC C-type lectin receptor, B-lec protein
 AEA89021;
 AEA89021 standard;
 resistance to a disease.
 Carroll M, Kaufman
 05-DEC-2003; 2003GB-00028248
 03-DEC-2004; 2004WO-GB005108
 16-JUN-2005
 25-AUG-2005
 (ANIM-)
 (OXFO-)
 140
 2005-425385/43.
 8
 81
 17
 26
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 Similarity
 AEA89020
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 KYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNS-
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 QKSSSSKPSC----SCLVAITLGLLTAVLLSVLLYQWILCQGSNYSTCASCPSCPDRWM
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 16.5%;
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 Score 168.5; DB
Pred. No. 5e-09;
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 Mismatches
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 Length
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 protein
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 177
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 9
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 14-AUG-2000;
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 26-JUL-2000;
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 18-APR-2000;
19-MAY-2000;
 28-JUN-2000;
 17-JAN-2001;
 02-AUG-2001
 WO200155368-A1
 Homo sapiens.
2000US-0186350P
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2000US-0199074P
2000US-0209467P
2000US-0215135P
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2000US-0231243P
2000US-0231243P
2000US-02314414P
 extracellular matrix
 2001WO-US001348
 2000US-0180628P.
2000US-0184664P.
 2000US-0179065P
 protein,
 Seq
 immunomodulatory; Anti-HIV;
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 487
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2000US-0232401P.

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2000US-023499P.

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2000US-0236370P.
 2000US-0237037P.
2000US-0237038P.
2000US-0237039P.
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The invention relates to isolated nucleic acid molecules encoding novel chuman secreted extracellular matrix proteins (SPs). The polynucleotides condition in e.g. cand proteins are used to prevent, treat a medical condition in e.g. chumans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. For condition condition in e.g. candition in e.g. condition in e.g. condition in e.g. candition in e.g. ca
 17-NOV-2000;
01-DEC-2000;
01-DEC-2000;
05-DEC-2000;
05-DEC-2000;
06-DEC-2000;
06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
 Nucleic acid molecules encoding human secreted extracellular matrix proteins, used in preventing, treating or ameliorating a disorder, e.g Alzheimer's and Parkinson's diseases and cancers.
 Claim
 (HUMA-) HUMAN
 2001-465572/50.
 β
 SEQ ID NO
 Barash SC,
 2000US-0249300P.
2000US-0250391P.
2000US-0250391P.
2000US-0251030P.
2000US-0251988P.
2000US-02567199.
2000US-0251479P.
2000US-0251856P.
2000US-0251869P.
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 2000US-0251990P.
2000US-0254097P.
 2001US-0259678P
 GENOME SCI INC
 487; 577pp; English.
 Ruben
 SM;
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RESULT 11
ABB17910
ID ABB17
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 Ś
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 127
 183
 182
 89
 69
 VCKKV 187
 RREPWIGLRRVGDEFHWVNGDPFD-----PDTFTIAGPGECVFVEPTRLVSTECLMTRPW
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 186
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 126
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Query Match Best Local S Matches 36

Similarity

16.1%; Score 165; DB 4; 328.8%; Pred. No. 1.2e-08; tive 24; Mismatches 53;

Length 189; Indels

12;

Gaps

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36;

Conservative

24;

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 Human
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2000US-0235759P.
2000US-023575P.
 2001WO-US001334.
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 related
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 therapy; vaccine.
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vulnerary;
 12-SEP - 2000
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2000US-0231968

2000US-0232399P

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2000US-023636P

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2000US-0236370P

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2000US-0249211P

2000US-024921P

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RESULT 12
ABP48057
ID ABP48
XX
AC ABP48
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DT 23-AU
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 (ABB14678-ABB18001) useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant) agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) infections. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly of from WIPO at ftp.wipo.int/pub/published_pct_sequences
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 01-DEC-2000;

05-DEC-2000;

05-DEC-2000;

05-DEC-2000;

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08-DEC-2000;

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08-DEC-2000;

08-DEC-2000;
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 Human polypeptide SEQ ID NO 487
 ABP48057 standard; protein; 189 AA
 Sequence 189 AA;
 Claim 11; SEQ ID
 (HUMA-) HUMAN GENOME
 23-AUG-2002
 invention
 metastases.
 2001-541565/60.
)B; ABA14236.
 182
 183
 127
 128
 ξ
 8
 69
 36;
 Similarity
 CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQKELEFMFKF-T
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2000US-0251938P.
2000US-0256719P.
2000US-0251856P.
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2000US-0251989P.
2000US-0251989P.
2000US-0251989P.
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 (first entry)
 relates to novel genes (ABA11004-ABA21534) and proteins
 NO 6567; 1701pp + Sequence Listing; English
 SC,
 SCI
 16.1%;
 Ruben
 24;
 Score 165; DB 4; Length 189;
Pred. No. 1.2e-08;
4; Mismatches 53; Indels
 ĸ
 12;
 Gaps
 cancers
 127
 126
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 04-FEB-2000;
28-JUN-2000;
 US2002042386-A1
 07-JUL-2000
 17-JAN-2001; 2001US-00764870
 Homo sapiens
 (ROSE/)
(RUBE/)
(BARA/)
 ROSEN C
RUBEN S
BARASH
 2000US-0216880P.
2000US-0217487P.
2000US-0217487P.
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 RESULT 13
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 5
 CC (ABP47846-ABP48110) useful for preventing, treating or ameliorating CC medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital, (b) immune CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic CC anaemia, autoimmune thyroiditis, diabetes mallitus, Crohn's disease, CC multiple sclerosis, rheumatoid arthritis and ulcerative collitis; (c) CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing (e) neurological disease e.g. cerebral anoxia and epilepsy; and (f) CC infectious diseases such as vival, bacterial, fungal and parasitic CC infectious diseases such as cerebral anoxia and epilepsy; and (f) CC infectious diseases such as obtained in electronic format directly from USPTO at seguance data for this patent did not form part of CC from USPTO at seguance data for this patent did not format directly from USPTO at seguance data obtained in electronic format directly
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Matches 36
 New nucleic acidend prevention and prevention antibodies.
 WPI; 200
N-PSDB;
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 US2003059875-A1
 Homo
 muscular disorder; reproductive disorder; gastrointestinal disorder; pulmonary disorder; cardiovascular disorder; renal disorder; inflammatory disorder; proliferative disorder; Human.
 Human protein
 ADC11019
 Sequence 189
 Claim 11;
 19-APR-2002; 2002US-00125540.
 27-MAR-2003
 18-DEC-2003
 The invention relate (ABP47846-ABP48110)
 2002-470713/50.
DB; ABQ66732.
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 VCKKV 187
 SEQ
 acid
 Conservative
 AA;
 (first
 ä
 from extracellular matrix gene
 id encoding human proteins, useful for diagnosis, treatment
of e.g. osteoporosis, also related polypeptides and
 ö
 protein; 189
 487;
 entry)
 16.1%; Sc
28.8%; Pr
tive 24;
 ç
 novel
 235pp
 Score 165; DB 5; Length 189; Pred. No. 1.2e-08; 4; Mismatches 53; Indels
 genes (ABQ66521-ABQ66785) and
 + Sequence Listing; English.
 65
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 and proteins
ameliorating
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 Gaps
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07-JUN-2000
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2000US-0198123P
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01-NO
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02-OCT-2000;
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17-NOV-2000;
 N-PSDB; ADC10754
 WPI; 2003-743765/70.
 Rosen CA,
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 HUMAN
 Ruben SM,
 2000US-0236802P
2000US-0237033P
2000US-0237039P
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RESULT 14
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 Ct their fragments, epitopes and homologues) an isolated antibody that the susceptibility to the protein, diagnosing a pathological condition or susceptibility to a pathological condition (comprising determining the presence or absence of a mutation in the nucleic acid and diagnosing a condition based on the presence or absence of the mutation), diagnosing a condition based on the presence or amount of expression of the condition or comprising determining the presence or amount of expression of the condition of comprising determining the presence or amount of expression of the corresponding a medical condition by administering the nucleic acid on the grotein to a mammalian subject, identifying a binding partner to the corresponding to the cDNA sequence, and identifying an acid in it is olating the supernatant, detecting an activity in a biological assay (comprising expressing the nucleic acid in a saay and identifying the protein in the supernatant having the cacid vity). The nucleic acids and proteins display the following activities Cytostatic, antibacterial, Virucide, Neuroprotective, antipactory Minacological, Cardiant, Card
 Query Match
Best Local S
Matches 36
 New isolated nucleic acids and polypeptides, useful for diagnosing, treating, and/or preventing disorders, such as cancer, infections, cardiovascular and inflammatory diseases.
 Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopoiesis; tissue growth factor; immunomodulatory; cancer; leukaemia;
03-FEB-2000; 2000US-00496914
27-APR-2000; 2000US-00560875
20-JUN-2000; 2000US-00598075
 Human
 06-NOV-2001
 AAM78675 standard; protein; 188 AA.
 Nephrotropic, Antiinflammatory, Muscular-Gen, Respiratory-Gen,
 novel genes.
 The invention relates to an isolated nucleic acid molecule (cDNA)
 05-FEB-2001;
 09-AUG-2001
 AAM78675;
 (expressing the protein), the extracellular matrix proteins (including
 WO200157190-A2
 182 VCSKM 186
 183 VCKKV 187
 127 RREPWIGLRRVGDEFHWVNGDPFD-----PDTFTIAGPGECVFVEPTRLVSTECLMTRPW
 128 EAFCWIGLRN-NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGLQASSCEVPLHG
 11; SEQ ID NO 487; 235pp; English.
 protein
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 36;
 system disorder; arthritis;
 Similarity
 a human extracellular matrix protein, representing on nes. Also included are recombinant vectors, host cells
 CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQKELEFMFKF-T
 Conservative
 2001WO-US004098
 (first entry)
 SEQ ID
 16.1%;
 NO 1337.
 24;
 Score 165; DB 7;
Pred. No. 1.2e-08;
4; Mismatches 53
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15-SEP-2000;
20-OCT-2000;
30-NOV-2000;
 production of other cytokines in other cell populations. The polymucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopolesis regulating activity, tissue growth factor activity, immunomodulatory activity and activin/inhbin activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation. Note: Records for SEQ ID NO 2110 (AAKS2581), 2111 (AAKS2582) and 3666 (AAM80020) are omitted as the relevant pages from the sequence listing were missing at the time of publication
 Human; INTERCEPT 289; T cell; heart; liver; pancreas; placenta; brain; skeletal muscle; kidney; spleen; lymph node; peripheral blood leukocyte bone marrow; thymus tissue; abnormal blood coagulation; asthma; cancer; anaphylaxis; hepatitis; multiple sclerosis; coronary artery disease; malaria; atopic dermatitis; amyotrophic lateral sclerosis; meningitis;
 Xue
attention
 Human INTERCEPT 289 form la polypeptide.
 07-SEP-2001
 AAU00671 standard;
 Sequence 188 AA;
 The invention relates to polynucleotides (AAK51456-AAK53435) and the encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating cytokine, cell proliferation or cell differentiation or which may induc
 Claim
 Nucleic acids encoding polypeptides in diagnosis and gene therapy.
 (HYSE-)
 Local Similarity
 diagnosis and gene
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 y YT, Liu C,
', Zhao QA,
AJ, Yang Y,
 2001-476283/51.
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 HYSEQ INC.
 AAK51808.
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 K 186
 KYFIĞLIYHREEKRWRWINNSVFN-GNVTNQNQNFNCATIGLTKTFDAASCDISYRRICE
 FCWIGL---RNNSGWRWEDGSPLNFSRISSNSFVQTCGAIN-KNGLQASSCEVPLHGVCK
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 IISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTR
 ITLGLLTAVILSV-----ILYQWILCQGSN------YSTC-----ASCPS------
 Page
 2000US-00620325.

2000US-00654936.

2000US-00663561.

2000US-00693325.

2000US-00728422.
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 3580; 6221pp;
 Wang D, Wang D, Wang D, Wejhrman
 Drmanac RT,
Wang D, Wang
 protein; 188
 entry)
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26.5%;
 23; Mismatches
 Score 159; DB 4
Pred. No. 5e-08;
 English.
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Goodrich R;
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The sequence represents human INTERCEPT 289 form 1a polypeptide. This composed and similar others exhibit the ability to affect growth, composed and similar others exhibit the ability to affect growth, composed and similar others exhibit the ability, morphology, or composed and colls of the heart, liver, composed and colls of the heart, liver, composed and the proposed and colls of the heart, liver, composed and the proposed and colls of the heart, liver, composed and the proposed and the propo
 Matches
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 New isolated nucleic acid molecule for diagnosis, prevention, and therapy of human and other animal disorder, or as modulating agent for regulating cellular processes.
 Sequence 188
 Claim 8;
 N-PSDB;
 Mackay CR,
 Domain
 Key
 hypoglycaemia; diabetes mellitus; endometriosis; pulmonary embolism; muscular dystrophy; immuno-competence; vertebrate; blood; serum; lung
 23-JUN-2000;
 WO200129088-A1
 (MILL-) MILLENNIUM PHARM INC
 Local
 sapiens.
 2001-308477/32.
 185
 186
 130
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 48;
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 Similarity
 AAS00661.
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 Fig 2A-2B; 263pp; English
 K 186
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 185
 Myers PS,
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 2000WO-US017386
 99US-00420707
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 Location/Qualifiers
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26.5%;
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Search completed: January 9, 2006, 15:30:24 Job time : 90.977 secs



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 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
 Minimum DB
Maximum DB
 Total number of hits satisfying chosen parameters:
 Scoring table:
 Sequence:
 protein
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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 1867569 seqs, 417829326 residues
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US-09-811-367B-3
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US-09-811-367B-7
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US-10-287-436A-1251
US-10-287-436A-1251
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US-09-752-514-1
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Sequence 5210, Appli
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 Description
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RESULT 2 US-10-207-655-196

Sequence 196, Application US/10207655
Publication No. US20030118592A1
GENERAL INFORMATION:
APPLICANT: Ledbetter, Jeffrey A.

| 5 5 5 5 5                                                    | β Q                                                                         | US- S GG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              | Query<br>Best I<br>Matche                                                   | RESULT 1 US-09-811-367E Sequence 1, Patent No. U GENERAL INFO APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE REFERE CURRENT FILE FILE FILE REFERE CURRENT FILE FILE FILE REFERE CURRENT FILE FILE FILE FILE FILE FILE FILE FILE |            | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                                                                                                                                                                                                                                                                                                            |
|                                                              | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                                       | O9-811-367B-1 O9-811-367B-1 equence 1, Application US/0981 atent No. US20020155110A1 ENERAL INFORMATION: APPLICANT: GEMINI SCIENCE, INC APPLICANT: TAKAHABBH, NO. US2 APPLICANT: TAKAHABBH, NO. US2 APPLICANT: MIKAYAMA, TOSHITUM TITLE OF INVENTION: SOLUBLE MA TITLE OF INVENTION: PHARMACEU FILE REFERENCE: 021286/0278719 CURRENT APPLICATION NUMBER: US CURRENT FILING DATE: 2002-03-07 PRIOR APPLICATION NUMBER: 60/1 PRIOR PILING DATE: 2000-03-17 NUMBER: PATENTION NUMBER: 07 SOFTWARE: PATENTIN VERBION 3.0 EQ ID NO 1 LENGTH: 189 TYPE: PRT ORGANISM: Homo sapiens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                                                                                                                                                                                                                                                                                                                            |
| COGSNYSTCA                                                   | Similarity 9; Conserva MTDSVIYSMLE                                          | TO SEE SEE SEE SEE SEE SEE SEE SEE SEE SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            | 00000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                           |
| ASCPSC                                                       | 100.0<br>100.0<br>7ative<br>FLPTATO                                         | n US/<br>IOA1<br>IOA1<br>IOA1<br>TOSh<br>OLUBL<br>PHARM<br>PHARM<br>PHARM<br>PHARM<br>2002<br>2002<br>2002<br>2002<br>2000<br>2000<br>2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 189<br>189<br>189<br>189<br>189<br>189<br>188<br>188<br>188<br>188                                                                                                                                                                                                                                                                                               |
| PDR                                                          | TOAO                                                                        | 0981<br>INC<br>US2<br>ifum<br>E MA<br>87129<br>8719<br>8719<br>8719<br>8719<br>103-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | S S A A A A A A A A A A A A A A                                                                                                                                                                                                                                                                                                                                  |
| CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS | Score 1023; DB 3; Pred. No. 6.3e-94; 0; Mismatches 0; NDYGPQQKSSSKPSCSCLVAI | 11367B<br>C.<br>200201551<br>mi<br>CELL<br>UTICAL CC<br>9<br>5/09/811,<br>-12<br>190,716                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ALIGNMENTS | US-10-684-422-121 US-10-897-387-3 US-10-437-963-202199 US-10-425-115-254869 US-10-424-599-230262 US-10-425-114-55018 US-10-425-115-352851 US-10-425-115-352851 US-10-425-12-22 US-10-425-12-25-22 US-10-425-13-25-25 US-10-425-13-25-25 US-10-425-13-25-25 US-10-424-599-15-859 US-10-424-599-15-859 US-10-425-115-25-32 US-10-425-115-25-32 US-10-425-115-25-32 |
| LARDSHLLVITDNQEMS 120                                        | Length 189; Indels 0; Gaps 0; TLGLLTAVLLSVLLYQWIL 60                        | 10Aluaki<br>FUNCTION ASSOCIATED ANTIGEN (MAFA)<br>MPOSITIONS AND METHODS OF MAKING AND USING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            | Sequence 121, Appli Sequence 3, Appli Sequence 202199, Sequence 273015, Sequence 273015, Sequence 55018, Appl Sequence 55018, Appli Sequence 40232, Appli Sequence 32, Appli Sequence 32, Appli Sequence 2, Appli Sequence 156859, Sequence 156859, Sequence 156859, Sequence 256132, Sequence 256132, Sequence 254086, Sequence 254086, Sequence 254086         |

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 ; ORGANISM: Homo sapiens US-10-207-655-196
 CURRENT APPLICATION NUMBER: US/10/756,149
CURRENT FILING DATE: 2004-01-12
NUMBER OF SEQ ID NOS: 5818
SOFTWARE: PatentIn version 3.2
SEQ ID NO 5210
LENGTH: 189
 Sequence 5210, Application US/10756149 Publication No. US20050181375A1 GENERAL INFORMATION:
 APPLICANT: Hayden-Ledbetter, Martha S.
TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
FILE REFERENCE: 390069.401C1
CURRENT APPLICATION NUMBER: US/10/207,655
CURRENT FILING DATE: 2002-07-25
NUMBER OF SEQ ID NOS: 426
SOPTWARE: Patentin version 3.0
SEQ ID NO 196
LENGTH: 189
TYPE: PRT
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Best Local Similarity 98.4%;
Matches 186; Conservative
 Query Match
Best Local Similarity
 Matches 186; Conservative
 ORGANISM: Homo Sapiens -10-756-149-5210
 APPLICANT: Aziz, Natasha
APPLICANT: ZIOtnik, Albert
TITLE OF INVENTION: NOVEL METHODS OF DIAGNOSIS OF METASTATIC CANCER, COMPOSITIONS
TITLE OF INVENTION: METHODS OF SCREENING FOR MODULATORS OF METASTATIC CANCER
FILE REFERENCE: file
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 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 HGVCKKVRL 189
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 HWVCKKVRL 189
 HGVCKKVRL 189
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS 120
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
HWVCKKVRL 189
 98.4%;
 Score 1007; DB 5;
Pred. No. 2.5e-92;
1; Mismatches 2;
 1; Mismatches
 Score 1007; DB 4; Pred. No. 2.5e-92;
 Length 189;
 Length 189;
 Indels
 Indels
 0,
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 Gaps
 Gaps
 180
 120
 120
 60
 60
 60
 120
 0
 0
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US-09-811-367B-5

; Sequence 5, Application US/09811367B

; Patent No. US20020155110A1

; GENERAL INCORMATION:

; APPLICANT: GEMINI SCIENCE, INC.

; APPLICANT: Mikayama, Toshifumi

; TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)

; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND US

; FILE REFERENCE: 021286/0278719

; CURRENT APPLICATION NUMBER: US/09/811,367B

; CURRENT FILING DATE: 2002-03-12

; PRIOR APPLICATION NUMBER: 60/190,716

; PRIOR FILING DATE: 2000-03-17

; NUMBER OF SEQ ID NOS: 20

; SOFTWARE: PatentIn version 3.0

; SOFTWARE: PatentIn version 3.0
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 US-09-811-367B-3
 RESULT 4
US-09-811-367B-3
 Sequence 3, Application US/09811367B Patent No. US20020155110A1 GENERAL INFORMATION:
Query Match
Best Local Similarity
Matches 100; Conserv
 Query Match 53.6%; Score 548.5; DB 3; Best Local Similarity 55.6%; Pred. No. 1.7e-46; Matches 104; Conservative 26; Mismatches 56;
 SOFTWARE: PatentIn version 3.0 SEQ ID NO 3
 APPLICANT: GEMINI SCIENCE, INC.
APPLICANT: Takahashi, No. US20020155110Aluaki
APPLICANT: Mikayama, Toshitumi
TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)
TITLE OF INVENTION: PHARMACBUTICAL COMPOSITIONS AND METHODS OF MAKING AND USING THEN
FILE REFERENCE: 021286/0278719
CURRENT APPLICATION NUMBER: US/09/811,367B
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR FILING DATE: 2000-03-17
NUMBER OF SEQ ID NOS: 20
RUMBER OF SEQ ID NOS: 20
 LENGTH: 188
TYPE: PRT
ORGANISM: Mus musculus
 LENGTH: 188
TYPE: PRT
ORGANISM: Rattus norvegicus
 121
 180 QWICKKV 186
 181 HGVCKKV 187
 121 LFGEYLGODFYWIGLRNIDGWRWEGGPALSL-RILTNSLIORCGAIHRNGLOASSCEVAL
 61
 61
 1 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL 60
 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS 120
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL 180
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 Conservative
 51.4%; Score 525.5; DB 3; 53.5%; Pred. No. 3.4e-44; tive 29; Mismatches 57;
 Length 188;
 Length 188;
 Indels
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US-09-764-870-487
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 RESULT 7
US-10-125-540-487
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 US-10-125-540-487
 US-09-764-870-487
 Prior application data removed - consult PALM NUMBER OF SEQ ID NOS: 646
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 487
 GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ14
CURRENT APPLICATION NUMBER: US/09/764,870
CURRENT FILING DATE: 2001-01-17
 Sequence 487, Application US/10125540
Publication No. US20030059875A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ14C1
CURRENT APPLICATION NUMBER: US/10/125,540
CURRENT FILING DATE: 2002-04-19
 Prior Application removed - See File Wrapper NUMBER OF SEQ ID NOS: 646 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 487
 Sequence 487, Application US/09764870 Patent No. US20020042386A1
 Matches
 Query Match
Query Match
 LENGTH: 18
TYPE: PRT
 TYPE: PRT
ORGANISM: Homo sapiens
 LENGTH: 189
 ORGANISM: Homo sapiens
 Local Similarity
les 36; Conserv
 121
 121 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL 180
 127
 181 HGVCKKV 187
 182
 183 VCKKV 187
 180 QWICEKV 186
 61
 5
 8
 69 CASCPS-CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLS 127
 189
 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
 COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS 120
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITIGLLTAVLLSVLLYQWIL
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
 RREPWIGLRRVGDEFHWVNGDPFD-----PDTFTIAGPGECVFVEPTRLVSTECLMTRPW 181
 EAFCWIGLRN-NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGLQASSCEVPLHG
 CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQKELEFMFKF-T 126
 VCSKM 186
 Conservative
 16.1%;
28.8%;
 16.18;
 24;
 Score 165; DB 3; I
Pred. No. 3.6e-08;
24; Mismatches 53;
 Score 165;
 BB
 and
 or
 4
 or file wrapper
 Antibodies
 Length 189;
 Length 189;
 Indels 12;
 Gaps
 179
 120
 182
 60
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APPLICANT: HOLIZMAN, DOUGLAS A
APPLICANT: HOLIZMAN, DOUGLAS A
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THE
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THE
TITLE OF INVENTION: USES.

FILE REFERENCE: MP100-5350MNIM
CURRENT APPLICATION NUMBER: US/09/759,130B
CURRENT FILING DATE: 2002-09-16
PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR APPLICATION NUMBER: US 09/594,97
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR APPLICATION NUMBER: US 09/333,159
PRIOR APPLICATION NUMBER: US 09/333,159
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR APPLICATION NUMBER: US 09/342,364
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 US-09-759-130B-83
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 US-09-759-130B-83
 Sequence 83, Application No. US20
GENERAL INFORMATION
 Matches
 Matches
 SEQ ID NO 83
 Best Local Similarity
 APPLICANT: Millennium Pharmaceuticals,
APPLICANT: McCarthy, Sean A
APPLICANT: Fraser, Christopher C
APPLICANT: Sharp, John D
APPLICANT: Barnes, Thomas S
APPLICANT: Kirst, Susan J
APPLICANT: Mackay, Charles R
 Best Local
 Query Match
 APPLICANT:
APPLICANT:
APPLICANT:
 PRIOR APPLICATION NUMBER: US 09/420,707
PRIOR FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 460
 SOFTWARE:
 APPLICANT:
 APPLICANT:
 LENGTH: 18
TYPE: PRT
 ORGANISM: Homo sapiens
 APPLICATION NUMBER: US 09/602,871 FILING DATE: 2000-06-23
 APPLICATION NUMBER: US 09/393,996 FILING DATE: 1999-09-10
 127 RREPWIGLRRVGDEFHWVNGDPFD-----PDTFTIAGPGECVFVEPTRLVSTECLMTRPW 181
 182 VCSKM 186
 183 VCKKV 187
 128 EAFCWIGLRN-NSGWRWEDGSPLNFSRISSNSFV----QTCGAINKNGLQASSCEVPLHG
 69 CASCPS-CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLS
41 ITLGLLTAVLLSV-----LLYQWILCQGSN------YSTC-----ASCP8------
 188
 Similarity
 CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQKELEFMFKF-T 126
 Application US/09759130B
 Mackay, Charl
 Goodearl,
 Leiby, Kevin R
Wrighton, Nicolas
 Conservative
 US20030022279A1
 for Windows
 28.8%;
 Andrew
 15.5%; Score 159; DB 3; Length 188; 26.5%; Pred. No. 1.4e-07; tive 23; Mismatches 74; Indels
 24;
 Version 4.0
 Pred. No. 3.60
4; Mismatches
 3.6e-08;
ches 53;
 Indels
 THERAPEUTIC, AND OTHER
 12;
 36;
 Gaps
 Gaps
 127
 74
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 ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-741-790-83
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 US-10-741-790-83
 RESULT
 Matches
 SEQ ID NO 83
 Sequence 83, Appropriate Publication No.
 Query Match
 GENERAL INFORMATION
 PRIOR
 PRIOR
PRIOR
 APPLICANT: Wrighton, Nicolas
APPLICANT: Goodearl, Andrew
APPLICANT: Holtzman, Douglas A
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
TITLE OF INVENTION: USES.
 NUMBER OF SEQ ID NOS: 460
 PRIOR
 PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR FILING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR FILING DATE: 2000-04-27
 CURRENT APPLICATION NUMBER: US/10/741,790
CURRENT FILING DATE: 2003-12-19
 APPLICANT: Millennium Pharmaceuticals, APPLICANT: McCarthy, Sean A APPLICANT: Fraser, Christopher C
 APPLICANT:
 FILE REFERENCE: MPIOO-5350MNIM
 APPLICANT:
 ENGTH: 188
 FILING DATE: 2000-04-27
APPLICATION NUMBER: US 09/578,063
 FILING DATE: 1999-10-19
 FILING DATE: 2000-06-23
APPLICATION NUMBER: US 09/420,707
 FILING DATE:
 APPLICATION NUMBER: US 09/342,364 FILING DATE: 1999-06-29
 APPLICATION NUMBER: US 09/333,159 FILING DATE: 1999-06-14
 FILING DATE: 2000-05-24
 FILING DATE:
 APPLICATION NUMBER: US 09/602,871
 FILING DATE: 1999-09-10
 APPLICATION NUMBER: US 09/393,996
 APPLICATION NUMBER: US 09/608,452
 FILING DATE:
 APPLICATION NUMBER: US 09/596,194
 185 K 185
 186
 126 KYFIGLIYHREEKRWRWINNSVFN-GNVTNQNQNFNCATIGLTKTFDAASCDISYRRICE 184
 130 FCWIGL---RNNSGWRWEDGSPLNFSRISSNSFVQTCGAIN-KNGLQASSCEVPLHGVCK
 41
 66 SYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDAE 125
 75
 48;
 σ
 σ
 Similarity
 FastSEQ
 ITLGLLTAVLLSV-----LLYQWILCQGSN-----YSTC-----ASCPS-----
 IISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTR 65
 K 186
 ----CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEA 129
 IISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTR
 Fraser, Christ
Sharp, John D
 McCarthy, Sean A
Fraser, Christopher C
 Mackay,
 Barnes, Thomas
Kirst, Susan J
 Application US/10741790
 eiby, Kevin R
 Conservative
 US20040121396A1
 for Windows
 Paul S
 2000-06-30
 2000-07-14
 Charles R
 Thomas S
 15.5%; Score 159; DB 4;
26.5%; Pred. No. 1.4e-07;
 23;
 Version 4.0
 Mismatches
 PREVENTIVE, THERAPEUTIC, AND OTHER
 Length 188;
 Indels
 36;
 Gaps
 65
 Sequence 1251, Application US/10287436A
Publication No. US20050202421A1
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
ITTLE OF INVENTION: METHOD FOR DIAGNOSIS AND TRE
ITTLE OF INVENTION: RHEUWATOID ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
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 US-10-287-436A-1251
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 US-10-287-436A-69
 RESULT 10
US-10-287-436A-69
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 CURRENT APPLICATION NUMBER: US/10/287,436A CURRENT FILING DATE: 2002-10-31 PRIOR APPLICATION NUMBER: US 60/336,220 PRIOR FILING DATE: 2001-10-31 NUMBER OF SEQ ID NOS: 1446 SOFTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 69
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1251
LENGTH: 188
 Sequence 69, Application US/10287436A Publication No. US20050202421A1 GENERAL INFORMATION:
 Matches
 Best
 Query Match
 PRIOR APPLICATION NUMBER: US 60/336,220 PRIOR FILING DATE: 2001-10-31 NUMBER OF SEQ ID NOS: 1446
 APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TITLE OF INVENTION: RHEUMATOID ARTHRITIS FILE REFERENCE: 10872.514696
 TYPE: PRT
ORGANISM: Homo sapiens
 LENGTH: 188
 Local Similarity
 185 K 185
 186 K 186
 126 KYFIGLIYHREEKRWRWINNSVFN-GNVTNQNQNFNCATIGLTKTFDAASCDISYRRICE
 130 FCWIGL---RNNSGWRWEDGSPLNFSRISSNSFVQTCGAIN-KNGLQASSCEVPLHGVCK 185
 185 K 185
 186 K 186
 126 KYFIGLIYHREEKRWRWINNSVFN-GNVTNONONFNCATIGLTKTFDAASCDISYRRICE
 130 FCWIGL---RNNSGWRWEDGSPLNFSRISSNSFVQTCGAIN-KNGLQASSCEVPLHGVCK 185
 41 ITLGLLTAVLLSV-----LLYQWILCQGSN-----YSTC-----ASCPS------
 66 SYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDAE 125
 75 -----CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEA 129
 99
 75
 48;
 6 IISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTR
 SYGTYCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDAE 125
 ----CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEA 129
 Conservative
 15.5%;
 23;
 Score 159; DB 5;
Pred. No. 1.4e-07;
 Mismatches
 DB 5;
 TREATMENT OF
 TREATMENT OF
 74;
 Length 188;
 Indels
 36;
 Gaps
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184

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; TYPE: PRT ; ORGANISM: Homo sapiens US-10-287-436A-1251
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 RESULT 12
US-11-097-143-5490
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 US-11-097-143-5490
 PRIOR APPLICATION NUMBER: 60/191,637
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 43008
SOPTWARE: FASESEQ for Windows Version
SEQ ID NO 5490
 GENERAL INFORMATION:
APPLICANT: Venter, J. Craig
APPLICANT: et al.
TITLE OF INVENTION: DETECTION KIT, SUCH AS
TITLE OF INVENTION: ARRAYS, FOR DETECTING
TITLE OF INVENTION: DROSOPHILA GENES.
 Sequence 5490, Application US/11097143
Publication No. US20050208558A1
 Query Match
Best Local Similarity
 Matches
 Query Match
 FILE REFERENCE: CL000728
CURRENT APPLICATION NUMBER: US/11/097,143
CURRENT FILING DATE: 2005-04-04
 PRIOR FILING DATE: 2000-02-24
 PRIOR APPLICATION NUMBER: 60/173,383 PRIOR FILING DATE: 1999-12-28
 PRIOR FILING DATE: 1999-10-28
PRIOR APPLICATION NUMBER: 60/164,769
PRIOR FILING DATE: 1999-11-12
 PRIOR APPLICATION NUMBER: 60/160,191 PRIOR FILING DATE: 1999-10-19
 PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILING DATE: 1999-10-05
 PRIOR FILING DATE: 2000-01-12
 PRIOR APPLICATION NUMBER: 60/175,693
 PRIOR APPLICATION NUMBER: 60/161,932
 ORGANISM: DROSOPHILA
 LENGTH: 188
 Local
 126 KYFIGLIYHREEKRWRWINNSVEN-GNVTNQNQNENCATIGLTKTEDAASCDISYRRICE 184
 185 K 185
 186 K 186
 130 FCWIGL---RNNSGWRWEDGSPLNFSRISSNSFVQTCGAIN-KNGLQASSCEVPLHGVCK 185
 66 SYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDAE 125
 41 ITLGLLTAVLLSV-----LLYQWILCQGSN-----YSTC----ASCPS-----
 75 -----CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEA 129
 48; Conservative
65
 90
 49 VLLSVLLYQWILC------QGSNYSTCASCPSC-----PDRW----MKYGNHCYYF 89
 6 IISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITTR
 Similarity
 SVEEK-DWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNSGW----- 141
GIFFKANWFKATQYCRYHGMHLASISSQEENDRLEKHIRD----FGLGHEHFWISGTDLA 120
 LILSVIISLOLLCLLDRIMATPPKGPGPVADCPNCVDESQYTPNKWIMPLLKLGEKRYYL 64
 Conservative
 for Windows Version 4.0
 15.5%;
 10.1%; Score 103.5; DB 21.0%; Pred. No. 0.051; tive 26; Mismatches
 ; Score 159; DB 5;
; Pred. No. 1.4e-07;
23; Mismatches 74
 NUCLEIC ACID
EXPRESSION OF 10,000 OR MORE
 DB 6;
 74;
 66;
 Length 188;
 Indels
 Length 188;
 Indels
 36;
 55
'
 Gaps
 65
```

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APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN
TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION UNMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 5642
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 US-10-114-893-48
 RESULT 14
US-10-369-493-5642
 S
 US-10-114-893-48
; LENGTH: 188
; TYPE: PRT
; ORGANIEM: Caenorhabditis elegans
US-10-369-493-5642
 APPLICANT: McCoy, John M.
APPLICANT: LaVallie, Edward R.
APPLICANT: Colline-Racie, Lisa A.
APPLICANT: Evans, Cheryl
APPLICANT: Evans, Cheryl
APPLICANT: Treacy, Maurice
APPLICANT: Treacy, Maurice
APPLICANT: Bowman, Michael R.
APPLICANT: Spaulding, Vikki
APPLICANT: Carlin-Duckett, McKeough
 EARLIER FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 321
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 48
 Sequence 48, Application US/10114893 Publication No. US20020193567A1
 GENERAL INFORMATION:
 GENERAL INFORMATION:
 Sequence 5642, Application US/10369493 Publication No. US20030233675A1
 Matches
 Query Match
 FILE REFERENCE: GI 6000-10A
CURRENT APPLICATION NUMBER: US/10/114,893
CURRENT FILING DATE: 2002-04-02
EARLIER APPLICATION NUMBER: 09/413,232
 APPLICANT: Jacobs, Kenneth
 APPLICANT: Kelleher, Kerry S.
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLECTIDES ENCODING THEM
 TYPE: PRT
ORGANISM: Homo sapiens
 LENGTH: 189
 Local
 180 LHGYCK 185
 121 DEGNFFWMATGRPITFTNWNAGEPNNFR--YENGEEENCLELWNRDGKGLKWNDSPCSFE 178
 142
 179 TYFVCE 184
 19;
 70 ASCPS-CPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEM 119
 9.8%;
Similarity 37.3%;
 Conservative
 ---RWEDGSPLNFSRISSNSFVQTCGAI-NKNG----LQASSCEVP 179
 10; Mismatches
 Score 100.5;
Pred. No. 0.1;
 DB 4;
 21;
 Indels
 Length 189;
 IN PLANTS FOR PRODUCTION
 1.
 Gaps
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PRIOR APPLICATION NUMBER: 60/175,693
PRIOR FILING DATE: 2000-01-12
PRIOR FILING DATE: 2000-01-184,831
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: 60/191,637
PRIOR APPLICATION NUMBER: 60/191,637
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 43008
SOPTWARE: FASISEQ for Windows Version 4.0
SEQ ID NO 3261
LENGTH: 188
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Search completed: January 9, 2006, 15:55:58 Job time: 73.9239 secs
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 US-11-097-143-3261
 RESULT 15
 PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILLING DATE: 1999-10-05
PRIOR PELLORITION NUMBER: 60/160,191
PRIOR FILLING DATE: 1999-10-19
PRIOR FILLING DATE: 1999-10-28
PRIOR FILLING DATE: 1999-10-28
PRIOR PELLORITION NUMBER: 60/164,769
PRIOR PELLORITION NUMBER: 60/173,383
PRIOR FILLING DATE: 1999-11-28
PRIOR APPLICATION NUMBER: 60/173,383
PRIOR FILLING DATE: 1999-12-28
 Sequence 3261, Application US/11097143 Publication No. US20050208558A1 GENERAL INFORMATION:
 Query Match 7.1%; Score 72.5; DB 6; Length 188; Best Local Similarity 25.2%; Pred. No. 64; Matches 31; Conservative 22; Mismatches 55; Indels 1
 Query Match 9.0%; Score 92.5; DB 4; Length 188; Best Local Similarity 31.4%; Pred. No. 0.64; Matches 27; Conservative 10; Mismatches 32; Indels 1
 TYPE: PRT
ORGANISM: DROSOPHILA
-11-097-143-3261
 APPLICANT: Venter, J. Craig

APPLICANT: et al.

TITLE OF INVENTION: DETECTION KIT, SUCH AS NUCLEIC ACID

TITLE OF INVENTION: ARRAYS, FOR DETECTING EXPRESSION OF 10,000 OR MORE

TITLE OF INVENTION: DROSOPHILA GENES.

FILE REFERENCE: CL000728

CURRENT APPLICATION NUMBER: US/11/097,143

CURRENT FILING DATE: 2005-04-04
 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
 110
 130 TYA 132
 150 NFS 152
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 79 WMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVI---TDNQEMSLLQVFLSEA-----
 KTNYVMIGLIFENREWSWTDGSSVNY 135
 2005-04-04
 Indels 15;
 17;
 Gaps
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 129
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Run on: OM protein -

protein search, using sw model

GenCore version 5.1.6 Copyright (c) 1993 - 2006 Compugen Ltd.

January 9, 2006, 15:36:43 ; Search time 10.7044 Seconds (without alignments)
149.966 Million cell updates/sec

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Minimum DB Maximum DB

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Total number of hits satisfying chosen parameters:

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61141 seqs, 8493638 residues

Scoring table: Sequence: Title: Perfect score:

BLOSUM62 Gapop 10.0 , Gapext 0.5

US-09-811-3678-1 1023

1 MTDSVIYSMLELPTATQAQN......

.GLQASSCEVPLHGVCKKVRL 189

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APPLICANT: Casman, Stacie
APPLICANT: Boldog, Ference
TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR APPLICATION UMBER: 60/263,799
PRIOR FILING DATE: 2001-01-23
PRIOR FILING DATE: 2001-01-24
PRIOR FILING DATE: 2001-01-24
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR APPLICATION NUMBER: 60/264,139
 US-10-055-877-209
 Sequence 209, A Publication No.
 GENERAL INFORMATION:
APPLICANT: DeCristofaro, Marc
 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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 Wolenc, Adam
Baumgartner, Jason
Shimkets, Richard
Gusev, Vladimir
 Gerlach, Valerie
Spytek, Kimberly
Ratelli, Luca
Kekuda, Ramesh
 Padigaru, Muralidhara
Miller, Charles
Tchernev, Velizar
 Shenoy, Suresh
 Vernet, Corine
Taupier Jr., Raymond
Pena, Carol
 Guo, Xiaojia
Zerhusen, Bryan
 Ballinger, Robert
Gerlach, Valerie
 Zhong, Mei
 Application US/10055877 o. US20050288241A1
 Eisen, Andrew
 Patturajan, Meera
Burgess, Cahterine
 Andrew, David
Mezes, Peter
 Anderson, David

 00011000
 US-11-147-492-26
US-10-980-388-101
US-11-147-492-13
US-11-055-822-192
US-11-0467-657-404
US-10-467-657-404
US-11-000-463-866
US-11-000-463-867
US-11-001-262-1
US-11-147-492-6
US-11-147-492-6
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US-10-980-459-32
US-11-147-492-8
US-10-980-459-32
US-11-147-492-8
US-10-980-459-32
US-10-131-826A-2
US-10-793-626-152
US-10-793-626-152
US-11-054-515-3235
US-11-194-246-292
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 Sequence 26, Appl
Sequence 101, App
Sequence 12, Appl
Sequence 192, App
Sequence 920, App
Sequence 866, App
Sequence 867, App
Sequence 4692, App
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Sequence 22, Appli
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Sequence 3335, Ap
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Sequence 292, App
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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                           | 1023<br>1548.07<br>525.5<br>525.5<br>44<br>42.4<br>41.5<br>41.5<br>41.5<br>38.5<br>38.5<br>36.5                                                                                                                                                                                                                                                                                               | red. N<br>core g<br>nd is                                               |                                                                                                                                                                                                                                                                                                                               |
| ພບພບພບພບພ<br>ຫ ໜ ዹ ዹ ዹ ፈ ሪ ሪ ሪ                                                                                                                                                            | 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                                                                                                                                                                                                                                                                                                                                         | rive<br>Noue                                                            | Published 1: /cgn2_6 2: /cgn2_6 3: /cgn2_6 4: /cgn2_6 6: /cgn2_6 6: /cgn2_6 8: /cgn2_6                                                                                                                                                                                                                                        |
| 188<br>189<br>189<br>189<br>188<br>188<br>188<br>188<br>189<br>6                                                                                                                          | 189 6 188 6 188 6 188 6 188 6 188 6 188 6 189 7 189 7 189 7 189 7 189 7 189 7 7 189 7 7 189 7 7 189 7 7 189 7 7 189 7 7 189 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7                                                                                                                                                                                                                             | the number of i<br>than or equal<br>d by analysis of                    | 00000000                                                                                                                                                                                                                                                                                                                      |
| US-10-945-853-1 US-10-867-657-6250 US-10-821-234-1421 US-11-205-109-33 US-10-884-730-88 US-10-945-853-2 US-11-064-774A-117 US-10-131-826A-240 US-10-467-657-3184                          | US-10-055-877-209 US-10-055-877-207 US-10-055-877-206 US-10-055-877-206 US-11-147-492-30 US-10-878-556A-193 US-10-878-556A-193 US-11-147-492-20 US-11-147-492-20 US-11-147-492-20 US-11-147-492-20 US-11-147-492-28 US-11-147-492-28 US-11-147-492-24 US-11-147-492-24 US-11-147-492-24 US-11-147-492-26 US-11-147-492-26 US-11-147-492-26 US-11-147-492-26 US-11-147-492-26 US-11-147-492-26 | results predicted leto the score of the foral score SUMMARIES           | Applications AA New:* /ptodata/2/pubpaa/US08 NEW_PUB.pep:* /ptodata/2/pubpaa/US06_NEW_PUB.pep:* /ptodata/2/pubpaa/US07_NEW_PUB.pep:* /ptodata/2/pubpaa/US07_NEW_PUB.pep:* /ptodata/2/pubpaa/US07_NEW_PUB.pep:* /ptodata/2/pubpaa/US10_NEW_PUB.pep:* /ptodata/2/pubpaa/US11_NEW_PUB.pep:* /ptodata/2/pubpaa/US11_NEW_PUB.pep:* |
| Sequence 1, Appli<br>Sequence 6250, Ap<br>Sequence 1421, Ap<br>Sequence 33, Appl<br>Sequence 88, Appl<br>Sequence 2, Appli<br>Sequence 117, App<br>Sequence 240, App<br>Sequence 3184, Ap |                                                                                                                                                                                                                                                                                                                                                                                               | oy chance to have a ne result being printed, distribution.  Description | NEW PUB. pep: *  NEW PUB. pep: *  NEW PUB. pep: *  NEW PUB. pep: *  NEW PUB. pep: *  NEW PUB. pep: *  NEW PUB. pep: *                                                                                                                                                                                                         |

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RESULT 2
US-10-055-877-207
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 ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-05:7-877-209
 PRIOR APPLICATION NUMBER: 60/264,478
PRIOR FILLING DATE: 2001-01-26
PRIOR PELLONGTON NUMBER: 60/263,351
PRIOR PELLONG DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/272,870
PRIOR PILLING DATE: 2001-03-02
PRIOR PELLONGTON NUMBER: 60/275,990
PRIOR PELLONGTON NUMBER: 60/275,990
PRIOR PELLONG DATE: 2001-03-14
PRIOR PELLONG DATE: 2001-03-14
PRIOR FILLING DATE: 2001-03-14
 Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 512
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 209
LENGTH: 189
TYPE: PRT
 Sequence 207, Application US/10055877 Publication No. US20050288241A1
 Query Match
Best Local Similarity
 GENERAL INFORMATION:
 Matches 189;
 APPLICANT:
 APPLICANT: DeCristofaro, Marc APPLICANT: Padigaru, Muralid
 APPLICANT:
 APPLICANT:
 APPLICANT:
 APPLICANT:
 APPLICANT:
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 APPLICANT:
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 APPLICANT:
 181
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 121
 61
 61
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 1 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 Andrew, Dav...
Andrew, Peter
Mezes, Peter
Patturajan, Meera
Patturajan, Cahterine
 Anderson, David
Ballinger, Robert
Gerlach, Valerie
Spytek, Kimberly
 HGVCKKVRL 189
 HGVCKKVRL 189
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 CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVBEKDWNSSLEFCLARDSHLLVITDNQEMS
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 Vernet, Corine
Taupier Jr., Raymond
Pena, Carol
 Baumgartner, Jason
Shimkets, Richard
Gusev, Vladimir
 Padigaru, Muralidhara
Miller, Charles
Tcherney, Velizar
 Shenoy, Suresh
Li, Li
Casman, Stacie
 ouo,
 Ratelli, Luca
Kekuda, Ramesh
 Wolenc, Adam
 Zerhusen,
 Conservative
 Xiaojia
usen, Bryan
 Mei
 100.0%; Score 1023; DB 6;
100.0%; Pred. No. 5.3e-100;
ative 0; Mismatches 0;
 Length 189;
 Indels
 0
 Gaps
 180
 180
 120
 120
 60
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APPLICANT:

APPLICANT:

Guo, Xiaojia Zerhusen, Bryan

APPLICANT:

Gerlach, Varca Gerlach, Varca Spytek, Kimberly Ratelli, Luca f: Kekuda, Ramesh Guo, Xiaojia Bryan

APPLICANT: APPLICANT:

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 US-10-055-877-205
; Sequence 205, Application US/10055877
; Publication No. US20050288241A1
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 ; ORGANISM: Homo sapiens US-10-055-877-207
 NUMBER: Pater
SOFTWARE: Pater
; SEQ ID NO 207
FNGTH: 189
 PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR FILING DATE: 2001-01-24
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
 GENERAL INFORMATION:
APPLICANT: DeCristofaro, Marc
APPLICANT: Padigaru, Muralidì
APPLICANT: Miller, Charles
 Query Match
Best Local (
 Matches
 APPLICANT:
 APPLICANT: Boldog, Ference TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby FILE REFERENCE: 21402-251
 APPLICANT:
 Remaining Prior Application data removed - See File Wrapper NUMBER OF SEQ ID NOS: 512
 PRIOR APPLICATION NUMBER: 60/272,870
PRIOR FILING DATE: 2001-03-02
PRIOR APPLICATION NUMBER: 60/275,990
 CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
 LENGTH: 18
TYPE: PRT
 PRIOR FILING DATE: 2001-03-14
 PRIOR APPLICATION NUMBER: 60/263,351
PRIOR FILING DATE: 2001-01-30
 PRIOR APPLICATION NUMBER: 60/264,478 PRIOR FILING DATE: 2001-01-26
 PRIOR APPLICATION NUMBER: 60/264,139 PRIOR FILING DATE: 2001-01-25
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 APPLICATION NUMBER: 60/275,927
 FILING DATE: 2001-03-14
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 121 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL 180
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 98.4%;
Similarity 98.4%;
 PatentIn Ver. 2.1
Tchernev, Velizar
Zhong, Mei
Anderson, David
Ballinger, Robert
Gerlach, Valerie
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 Padigaru, Muralidhara
Miller, Charles
 Conservative
 Score 1007; DB 6;
Pred. No. 2.5e-98;
1; Mismatches
 DB 6;
 <u>ب</u>
 Length 189;
 Indels
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 0,
 Gaps
 180
 120
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APPLICANT:

Burgess,

Cahterine

Mezes, Peter Patturajan, Meera

David

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 RESULT 4
US-10-055-877-206
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) ORGANISM: Mus musculus US-10-055-877-205
 SOFTWARE: Pat
SEQ ID NO 205
LENGTH: 188
 CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR APPLICATION DATE: 2001-01-19
 Best Local Similarity
Matches 104; Conserv
Sequence 206, Application US/10055877
 Query Match
 PRIOR APPLICATION NUMBER: 60/263,598
PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR FILING DATE: 2001-01-24
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
 APPLICANT: Boldog, Ference
TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
 Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 512
 PRIOR APPLICATION NUMBER: 60/275,927 PRIOR FILING DATE: 2001-03-14
 APPLICANT:
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 FILING DATE: 2001-01-30
APPLICATION NUMBER: 60/272,870
 APPLICATION NUMBER: 60/264,139 FILING DATE: 2001-01-25
 APPLICATION NUMBER: 60/275,990
 APPLICATION NUMBER: 60/263,351
 APPLICATION NUMBER: 60/264,478
 121
 121
 180 QWICKKV 186
 181 HGVCKKV 187
 61
 61
 1 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
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 Vernet, Corine
Taupier Jr., Raymond
Pena, Carol
 Baumgartner, Jason
Shimkets, Richard
Gusev, Vladimir
 Shenoy, Suresh
 Wolenc, Adam
 Eisen, Andrew
 53.6%; Score 548.5; DB 6; ilarity 55.6%; Pred. No. 1.8e-50; Conservative 26; Mismatches 56;
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 Length 188;
 1;
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APPLICANT: Boldog, Ference
TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR PILING DATE: 2001-01-24
PRIOR PILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR APPLICATION NUMBER: 60/264,478
PRIOR APPLICATION NUMBER: 60/264,478
PRIOR FILING DATE: 2001-01-26
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PRIOR FILING DATE: 2001-01-27
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PRIOR FILING DATE: 2001-01-26
PRIOR FILING DATE: 2001-01-26
PRIOR FILING DATE: 2001-01-26
PRIOR FILING DATE: 2001-01-26
S
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 ORGANISM: Rattus norvegicus
US-10-055-877-206
 SEQ ID NO 206
LENGTH: 188
TYPE: PRT
 GENERAL INFORMATION:
APPLICANT: DeCristo
 Publication No. US20050288241A1
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Matches
 Query Match
 APPLICANT:
 APPLICANT:
APPLICANT:
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 SOFTWARE: PatentIn Ver. 2.1
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 FILING DATE: 2001-03-14
 APPLICATION NUMBER: 60/272,870 FILING DATE: 2001-03-02
 APPLICATION NUMBER: 60/263,351 FILING DATE: 2001-01-30
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 DeCristofaro, Marc
 MADNSÍYSTLELÞAAPRVÓDDSRWKVKAVLHRÞCVSYLVMVALGLLTVILMSLLLYQRTL
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Gerlach, Valerie
Spytek, Kimberly
Ratelli, Luca
Kekuda, Ramesh
 Padigaru, Muralidhara
Miller, Charles
 Vernet, Corine
Taupier Jr., Raymond
 Shimkets, Richard
Gusev, Vladimir
 Eisen, Andrew Wolenc, Adam
 Patturajan, Meera
Burgess, Cahterine
 Andrew, David
Mezes, Peter
 Guo, Xiaojia
 Anderson, David
 Shenoy, Suresh
 Pena,
 Zerhusen, Bryan
 Zhong, Mei
 Tchernev,
 Baumgartner, Jason
 Carol
 Stacie
Ference
 David
 Velizar
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 Length
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 60
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119

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US-10-821-234-1432
Sequence 1432, Application US/10821234
Publication No. US20050255114A1
 NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.2
SEQ ID NO 30
LENGTH: 189
TYPE: PRT
DRAANISM: homo sapiens
US-11-147-492-30
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 RESULT 5
US-11-147-492-30
US-11-147-492-30
; Sequence 30, Application US/11147492
; Publication No. US20050276785A1
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 APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR FILING DATE: 2003-04-07
PRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
 SOFTWARE: pt_SEQ_genes Version 1.0
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LENGTH: 189
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Best Local Similarity
 GENERAL INFORMATION:
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 GENERAL INFORMATION:
 APPLICANT: Groetzbach, Georg
APPLICANT: Schultheiss, Heinz-Peter
APPLICANT: Sowade, Olaf
APPLICANT: Stuerzebecher, Claus-Steffen
TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
FILE REFERENCE: 53223
 APPLICANT: Kapp, Joachim-Freidrich
APPLICANT: Kuehl, Uwe
APPLICANT: Groetzbach, Georg
 CURRENT APPLICATION NUMBER: US/11/147,492
CURRENT FILING DATE: 2005-66-07
PRIOR APPLICATION NUMBER: US 60/579,024
PRIOR FILING DATE: 2004-06-04
 APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
 121
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 181 HGVCKKV 187
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 Conservative
 4.6%; Score 47; DB 7;
24.2%; Pred. No. 4.3e+02;
ative 20; Mismatches 57
 and Treatment
 57; Indels
 Length 189;
 of Preeclampsia
 48;
 Gaps
 98
 56
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 Publication No. US20050266399A1
GENERAL INFORMATION:
APPLICANT: Hoffmann La-Roche Inc.
TITLE OF INVENTION: HCV regulated protein expression
FILE REFERENCE: 21762
CURRENT APPLICATION NUMBER: US/10/878,556A
CURRENT FILING DATE: 2004-06-28
NUMBER OF SEQ ID NOS: 199
SOFTWARE: Patentin version 3.1
SEQ ID NO 193
LENGTH: 189
 US-10-980-388-90
; Sequence 90, Application US/10980388
; Publication No. US20050255490A1
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 US-10-878-556A-193
 US-10-878-556A-193 ; Sequence 193, Application US/10878556A
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 US-10-821-234-1432
 RESULT 7
 GENERAL INFORMATION:
 Matches
 Query Match
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TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related Appl FILE REFERENCE: 00325. US1
CURRENT APPLICATION NUMBER: US/10/980,388
CURRENT FILING DATE: 2004-11-02
PRIOR APPLICATION NUMBER: US/09/791,932
PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/184,305
PRIOR APPLICATION NUMBER: 60/184,305
PRIOR APPLICATION NUMBER: 60/184,305
PRIOR APPLICATION NUMBER: 60/184,304
 APPLICANT: Vogeli, Gabriel APPLICANT: Parodi, Luis A APPLICANT: Hiebsch, Ronald
 TYPE: PRT
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: humangp/chr1-014805
DATABASE ENTRY DATE: 2003-04-22
 APPLICANT:
 APPLICANT:
 APPLICANT:
 APPLICANT:
 TYPE: PRT ORGANISM: Homo sapiens
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Local Similarity 24.3%;
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Huff, Rita M.
Wood, Linda S.
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Lind, Peter
 Kaytes, Paul S.
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 16; Mismatches
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Pred. No. 8.7e+02;
 41; Indels
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 Indels
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 Gaps
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119

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SOFTWARE: PatentIn version 3.0
SEQ ID NO 90
LENGTH: 188
TYPE: PRT
ORGANISM: Homo sapiens
US-10-980-388-90
 PRIOR APPLICATION NUMBER: US 60/579,024
PRIOR PILING DATE: 2004-06-04
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.2
SEQ ID NO 10
LENGTH: 189
TYPE: PRT
ORGANISM: homo mapiens
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 US-11-147-492-10
 RESULT 9
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 US-11-147-492-10
 Sequence 10, Application US/11147492 Publication No. US20050276785A1
 Query Match 4.2%; Score 42.5; DB 6; Best Local Similarity 21.8%; Pred. No. 1.2e+03; Matches 24; Conservative 15; Mismatches 36;
 GENERAL INFORMATION:
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 Best Local Similarity
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 PRIOR APPLICATION NUMBER: 60/218,492
PRIOR FILING DATE: 2000-07-20
 CURRENT APPLICATION NUMBER: US/11/147,492
CURRENT FILING DATE: 2005-06-07
 APPLICANT: Sowade, Olaf
APPLICANT: Stuerzebecher, Claus-Steffen
TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
 APPLICANT: Kapp, Joachim-Freidrich
APPLICANT: Kuehl, Uwe
APPLICANT: Groetzbach, Georg
 FILE REFERENCE: 53223
 APPLICATION NUMBER: 60/217,369
FILING DATE: 2000-07-11
APPLICATION NUMBER: 60/217,370
FILING DATE: 2000-07-11
 APPLICATION NUMBER: 60/184,303
FILING DATE: 2000-02-23
APPLICATION NUMBER: 60/184,397
 APPLICATION NUMBER: 60/188,880
 APPLICATION NUMBER: 60/184,247 FILING DATE: 2000-02-23
 FILING DATE:
 FILING DATE:
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 64 SNYSTCASCP---SCPDRWMKYG---NHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQ 117
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 2000-02-23
 2000-03-13
 2000-02-23
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 36;
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 35;
 37;
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US-11-137-465-60
 US-11-147-492-20
 US-11-147-492-20
APPLICANT: Kabnick, Karen
TITLE OF INVENTION: NOVEL COMPOUNDS
FILE REFERENCE: GP50018
FULL REFERENCE: GP50018
FULL REFERENCE: GP50018
FULL REFERENCE: GP50018
FULL REFULL
 GENERAL INFORMATION:
APPLICANT: Kapp, Joachim-Freidrich
APPLICANT: Kuchl, Uwe
APPLICANT: Groetzbach, Georg
APPLICANT: Schultheiss, Heinz-Peter
APPLICANT: Sowade, Olas
APPLICANT: Stuerzebecher, Claus-Steffen
APPLICANT: Stuerzebecher, Claus-Steffen
 SEQ ID NO 20
LENGTH: 189
TYPE: PRT
ORGANISM: homo sapiens
 Sequence 20, Application US/11147492 Publication No. US20050276785A1
 Sequence 60, Application US/111 Publication No. US20050255558A1 GENERAL INFORMATION:
 Matches
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APPLICANT:
 CURRENT APPLICATION NUMBER: US/11/147,492 CURRENT FILING DATE: 2005-06-07 PRIOR APPLICATION NUMBER: US 60/579,024 PRIOR FILING DATE: 2004-06-04 NUMBER OF SEQ ID NOS: 34
 SOFTWARE: PatentIn version 3.2
 FILE REFERENCE: 53223
 APPLICANT: Agarwal, Pankaj
APPLICANT: Murdoch, Paul
 TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
 113 Y 113
 130 F 130
 113 Y 113
 130 F 130
 tch 4.1%; Score 41.5; DB 7; al Similarity 25.6%; Pred. No. 1.6e+03; 31; Conservative 13; Mismatches 40;
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 Murdoch, Paul R.
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Smith, Randall, F.
 Application US/11137465
 Zhaoying
 Length 189;
 Indels
 37;
 SC-PDRWM 80
 Gaps
 56
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 RESULT 12
US-11-147-492-28
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 US-11-137-465-60
Sequence 24, Application US/11147492
Publication No. US20050276785A1
GENERAL INFORMATION:
APPLICANT: Kapp, Joachim-Freidrich
APPLICANT: Kuehl, Uwe
APPLICANT: Kuehl, Uwe
APPLICANT: Scottbach, Georg
APPLICANT: Schultheiße, Heinz-Petel
 CURRENT APPLICATION NUMBER: US/11/147,492
CURRENT FILING DATE: 2005-06-07
PRIOR APPLICATION NUMBER: US 60/579,024
PRIOR FILING DATE: 2004-06-04
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PatentIn version 3.2
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SEQ ID NO 60
LENGTH: 189
TYPE: PRT
ORGANISM: Homo sapiens
 GENERAL INFORMATION:
 Sequence 28, Application US/11147492
Publication No. US20050276785A1
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 Matches 16; Conservative
 -11-147-492-28
 APPLICANT: Stuerzebecher, Claus-Steffen
TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
FILE REFERENCE: 53223
 APPLICANT:
 APPLICANT: Kapp, Joach: APPLICANT: Kuehl, Uwe
 APPLICANT:
 NUMBER OF SEQ ID NOS: 66
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ORGANISM: homo sapiens
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 Groetzbach, Georg
Schultheiss, Heinz-Peter
Sowade, Olaf
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Schultheiss, Heinz-Peter
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 Joachim-Freidrich
 4.0%; Score 40.5; DB 7; Length 189; 25.6%; Pred. No. 2e+03;
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 Indels
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 37;
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 Gaps
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US-10-995-561-806
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 ; ORGANISM: Neisseria gonorrhoeae US-10-467-657-2750
 US-10-467-657-2750
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 US-11-147-492-24
 Query Match
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Matches 15
 Sequence 806, Application US/10995561 Publication No. US20050272054A1 GENERAL INFORMATION:
 SOFTWARE: SeqWin99, version 1.04
SEQ ID NO 2750
LENGTH: 188
TYPE: PRT
 Sequence 2750, Application US/10467657 Publication No. US20050260581A1
 SOFTWARE: PatentIn version 3.2 SEQ ID NO 24
 GENERAL INFORMATION:
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 APPLICANT: CARGILL, TITLE OF INVENTION: TITLE OF INVENTION:
 CURRENT APPLICATION NUMBER: US/10/467,657
CURRENT FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: GB-0103424.8
PRIOR FILING DATE: 2001-02-12
 APPLICANT: CHIRON SPA
APPLICANT: PONTANA MARIA RITA
APPLICANT: PIZZA MARIAGYRAZIA
APPLICANT: MASIGNANI Vega
APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
FILE REFERENCE:
 CURRENT APPLICATION NUMBER: US/11/147,492
CURRENT FILING DATE: 2005-06-07
PRIOR APPLICATION NUMBER: US 60/579,024
PRIOR FILING DATE: 2004-06-04
NUMBER OF SEQ ID NOS: 34
 NUMBER OF SEQ ID NOS: 9218
 APPLICANT: Stuerzebecher, Claus-Steffen
TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
 LENGTH:
 FILE REFERENCE: 53223
 TYPE: PRT
ORGANISM: homo sapiens
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 102
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Michele et al.
GENETIC POLYMORPHISMS ASSOCIATED WITH
CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS
 3.8%; Score 38.5; DB 7;
24.6%; Pred. No. 3.2e+03;
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 3.7%; Score 38; DB 6;
20.0%; Pred. No. 3.6e+03;
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 14; Indels
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 21
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CURRENT APPLICATION NUMBER: US/10/995,561
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CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATION NUMBER: US/10/995,561
CURRENT APPLICATE: 2004-11-24

NUMBER OF SEQ ID NOS: 85702
SOFTWARE: PROSECUE OF WINDOWS VERSION 4.0
SEQ ID NO 806
SEQ ID NO 806
LENGTH: 189
TYPE: PRT
ORDANISM: Homo Bapiens
US-10-995-561-806

Query Match
Best Local Similarity 35.0%; Pred. No. 3.6e+03;
Matches 7; Conservative 3; Mismatches 6; Indels 4; Gaps 1;
Matches 7; Conservative 3; Mismatches 6; Indels 4; Gaps 1;
Db 29 DGWYYANH----TEEKTOW 44

Search completed: January 9, 2006, 15:56:42
Job time: 11.7044 secs
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| 22222232323232323232323232323232323232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Result         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1029<br>5688.58<br>838<br>8388.55<br>1628.55<br>1433.55<br>1433.55<br>1433.55<br>1433.55<br>1433.55<br>1433.55<br>1433.55<br>1433.55<br>1522.53<br>1522.55<br>1522.55<br>1522.55<br>1522.55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Score          |
| 100 0<br>81 4 4<br>81 4 8<br>81 4 4<br>81 6 6<br>8 6 6<br>8 6 6 8<br>8 6 6 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Query<br>Match |
| 188<br>188<br>188<br>188<br>189<br>189<br>189<br>189<br>189<br>189                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Length         |
| 400479049445744678894475                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BB             |
| AAE11760<br>AAR77033<br>AAW878277<br>AAE11761<br>ADD25635<br>ADV19892<br>AAW88265<br>AAE11759<br>AAE11759<br>AAE119837<br>ABB17910<br>AAB17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17910<br>ABH17925141<br>ABH17925141<br>ABH17925141<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>ABH179262<br>AB | ID             |
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| 45        | 44        | 43         | 42        | 41        | 40        | 39        | 38       | 37        | 36        | 35        | 34        | 33        | 32        | 31        | 30        | 29        | 28        | 27           | 26              | 25        |
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| 4.9       | 4.9       | 4.9        | 5.0       | 5.0       | 5.0       | 5.0       | 5.1      | 5.1       | 5.1       | 5.1       | 5.1       | 5.1       | 5.1       | 5.2       | 5.2       | 5.2       | 5.2       | 5.3          | 5. <sub>3</sub> | 5.4       |
| 189       | 189       | 189        | 189       | 189       | 188       | 188       | 189      | 189       | 188       | 188       | 189       | 188       | 188       | 189       | 189       | 188       | 189       | 189          | 189             | 189       |
| 9         | 9         | σ          | 9         | w         | ø         | 4.        | œ        | 7         | 7         | 4.        | .4        | ω         | w         | œ         | 7         | σ         | N         | σ            | w               | 4         |
| AEA48225  | AEA79732  | ABU11464   | AEB38441  | AAB42960  | ABM93149  | ABG02083  | ADR58961 | ADM04618  | ADF06947  | AAG91196  | ABG07567  | AAG19860  | AAG60348  | ADR58963  | ADC37367  | ABM69571  | AAW98509  | ABU01363     | AAG56537        | AAB65153  |
| Aea48225  | Aea/9/32  | ADULT464   | Aeb38441  | Aab42960  | ADm93149  | Abg02083  | Adr58961 | Adm04618  | Adru6947  | Aag91196  | Abg0/56/  | Aagiyaso  | Aag60348  | Adr58963  | AdC37367  | ADM695/1  | Adwydouy  | ADUULSES     | Aags653/        | Aab65153  |
| Subtamily | S. COELIC | משות וושוו | L. pneumo | Human Okr | M. xantnu | Novel num |          | Human pro | Baccertar | C grucami | Novel num | Arabidops | Arabidops | Human Elk | Nuclear I | PHOLOTHER | H. PYTOLL | s. priedillo | Arabidops       | Basic IID |

## ALIGNMENTS

RESULT 1 AAE11760 18-DEC-2001 (first entry) Mus sp. AAE11760; AAE11760 standard; protein; 188 AA. Mouse mast cell function associated antigen (MAFA) protein.

Mouse; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL; immunosuppressive; cytostatic.

Key Domain

Location/Qualifiers 64. .188 "Extracellular domain"

WO200170805-A2

27-SEP-2001.

16-MAR-2001; 2001WO-US008596

17-MAR-2000; 2000US-0190716P

(GEMI-) GEMINI SCI INC

Takahashi N, Mikayama

Η.

WPI; 2001-611482/70. N-PSDB; AAD18735.

Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that binds to mast cell function-associated antigen ligand on target cell.

Example 1; Page 19; 49pp; English.

The present invention relates to a pharmaceutical composition comprising an agent which specifically binds to a mast cell function associated antigen (MARA) ligand on a target cell, and prevents or inhibits natural killer (NK) or T-cell-expressed cell surface MARA from binding to MAFA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA

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ARRESULT 2
AAR77033
ID AAR77
XX AAR77
XX AAR7
AC AAR7
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 Matches 188;
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 binding to a ligand on a target cell, by contacting the pharmaceutical composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in an amount sufficient to inhibit cell surface MAFA binding to the ligand on the target cell. The agent or the composition is useful for treating a cumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell- or CTU-susceptible tumour cell. The invention is also useful for inhibiting an activity of NK cell or a T-cell. The present sequence is mouse MAFA protein
A soluble form of mast cell function-associated antigen (MAFA) can be produced by recombinant techniques for use in the ligand- screening
 Claim 12;
 of inflammatory
 Novel DNA encoding a mast cell function-associated antigen (MAFA) - useful for screening for ligands of MAFA which are useful for preve
 WPI; 1995-366356/47.
N-PSDB; AAT01471.
 (YEDA)
(RYCU/)
 08-APR-1994;
 06-APR-1995;
 Rattus rattus.
 Mammalian
 01-FEB-1996
 AAR77033;
 AAR77033 standard; protein; 188
 Sequence 188 AA;
 19-OCT-1995
 W09527734-A1
 Mast
 identification; screening;
 Loca.
 cell function-associated antigen; MAFA; soluble; ligand;
tification; screening; inflammation; inflammatory; allergy; allergic;
 181
 181
 121
 121
 Ļ,
 61
 61
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 YEDA RES
 Similarity
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 WICKKVLY 188
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ
 LFGEYLGODFYWIGLRNIDGWRWEGGPALSLRILTNSLIORCGAIHRNGLOASSCEVALO
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 WICKKVLY 188
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 Page
 mast cell function-associated antigen (MAFA).
 Guthmann
 Conservative
 (first
 37;
 94IL-00109257.
 95WO-US004258
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 DEV CO LTD
 54pp; English
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 allergic
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 100.0%;
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 0;
 reactions
 Score 1029; DB 4;
Pred. No. 1.1e-102;
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 Mismatches
 0
 Indels
 Length
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 Gaps
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 Matches 151;
 Query Match
 New polypeptide having a sequence corresponding function-associated antigen - useful in forming pharmaceutical compositions in the treatment of
 31-MAY-1997;
 Mast cell function-associated antigen; MAFA; splice variant; inflammation; allergy; asthma; rheumatoid arthritis; tumour;
 Rat mast cell
 29-MAR-1999
 AAW88277;
 Sequence
 assay. The ligands that are identified may be used alone or in combination with the MAFA to prevent inflammatory and allergic
 diseases, and tumour
 N-PSDB;
 Hewitt EL,
 29-MAY-1998;
 03-DEC-1998
 WO9854209-A2
 Modified-site
 Modified-site
 AAW88277
 (PEPT-) PEPTIDE THERAPEUTICS LTD.
 1999-059806/05.
DB; AAV84222.
 121
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 Similarity
 WICKKVL 187
 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQ
 188 AA;
 standard; protein; 188
 WICEKVL 187
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
 Fig
 Lamers MBAC,
 Conservative
 (first entry)
 function-associated antigen (MAFA).
 97GB-00011148
 98WO-GB001572
 4:
 Location/Qualifiers 82. .84
 /note= "Asn is N-glycosylated"
 note=
 44pp;
 . 99
 81.4%;
80.7%;
 growth.
 "Asn
 English.
 Lamont
 15;
 is N-glycosylated"
 Score
Pred.
 Mismatches
 Þ
 838; DB 2;
No. 5.2e-82;
 Williams
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 to human mast cell and manufacturing inflammatory and a
 Length
 Indels
 188;
 rat;
therapy.
 <u>.</u>
 reactions
 Gaps
 allergic
 180
 180
 120
 60
 60
 0
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This is the amino acid sequence of rat mast cell function-associated antigen (MAFA), a type II membrane glycoprotein found on mast cells an basophils. The invention relates to cloning of the human MAFA molecule (see AAW88265) and to the discovery of splice variants (see AAW88266-67)

(see AAW88266-67)

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ARESULT 4
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Matches 151;
 of human MAFA that are not found in rat. Polypeptides and synthetic peptides (see AAW88258-64) based on human MAFA and human truncated MAFA, and polynucleotides encoding them, can be used in methods for the treatment of inflammatory and allergic diseases (e.g. rheumatoid arthritis and asthma), and tumour growth
 Sequence 188 AA;
The present invention relates to a pharmaceutical composition comprising an agent which specifically binds to a mast cell function associated antigen (MAFA) ligand on a target cell, and prevents or inhibits natural killer (NK)- or T-cell-expressed cell surface MAFA from binding to MAFA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MAFA binding to a ligand on a target cell, by contacting the pharmaceutical
 Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bin to mast cell function-associated antigen ligand on target cell.
 AAE11761 standard; protein;
 Takahashi N,
 17-MAR-2000; 2000US-0190716P
 16-MAR-2001; 2001WO-US008596
 27-SEP-2001
 WO200170805-A2
 Rat mast cell
 18-DEC-2001
 pharmaceutical composition; mast cell function associated antigen; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
 2001-611482/70
 181
 121
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 181
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 norvegicus
 GEMINI SCI
 Similarity
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 LFGEYLGODFYWIGLRNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ
 WICEKVL
 WICKKVL 187
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
 Conservative
 (first
 function associated antigen (MAFA) protein.
 Mikayama
 cytostatic
 entry)
 81.4%;
 English
 15;
 188
 Score
Pred.
 Mismatches
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 838; DB 2;
No. 5.2e-82;
 ٧,
 Length
 Indels
 188;
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 that binds
 Gaps
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RRESULT 5
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ID ADD2
XX ADD2
XX ADD2
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XX Manti
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Matches 151
 composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in an amount sufficient to inhibit cell surface MAPA binding to the ligand on the target cell. The agent or the composition is useful for treating a tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell- or CTL-susceptible tumour cell. The invention is also useful for inhibiting an activity of
 neuroprotective; hinge region; immunoglobulin heavy CH2 constant region; CH3 constant region; IgG1; antibody dependent cell-mediated cytotoxicity; ADCC;
 Sequence
 17-JAN-2001; 2001US-0367358P
17-JAN-2002; 2002US-00053530
03-JUN-2002; 2002US-0385691P
 malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma; rheumatoid arthritis; myasthenia gravis; Grave's disease;
 Binding
 15-JAN-2004
 ADD25635;
 ADD25635 standard;
 25-JUL-2002; 2002US-00207655
 US2003118592-A1
 type I diabetes
 antiarthritic;
 Unidentified
 121
 181
 181
 121
 61
 61
 151;
 or a T-cell.
 domain;
 domain-immunoglobulin
 Similarity
 GENECRAFT
 188
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 WICKKVL
 WICEKVL
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ
 CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 MADNS I YSTLELPAAPR VOODSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYORTL
 JA,
 Conservative
 8
 (first
 ; immunoglobulin; fusion protein; cytostatic; immunosuppressive; antidiabetic; antithyroid
 Hayden-Ledbetter
 mellitus; multiple
 187
 187
 INC.
 protein;
 entry)
 81.4%;
80.7%;
 The present sequence is rat MAFA protein
 15;
 189
 Score 838; DB 4;
Pred. No. 5.2e-82;
 fusion
 Mismatches
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 S.
 sclerosis; autoimmune disease
 protein-associated protein
 Length 188;
 antithyroid;
eavy chain;
 complement
 <u>,</u>
 Gaps
 fixation;
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 180
 60
 60
 120
 0
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New binding domain-immunoglobulin fusion protein, useful for treating subject having or suspected of having a malignant condition or a B-ce disorder, e.g. melanoma, Grave's disease or autoimmune disease.

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RESULT 6
ADY19892
ID ADY1
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AC ADY1
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DT 05-M
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 The invention relates to a binding domain-immunoglobulin fusion protein comprising a binding domain polypeptide that is fused to an immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain contain region polypeptide, and an immunoglobulin heavy chain contain region polypeptide that is fused to the hinge region polypeptide comprises: a wile-type human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the first cysteine is not mutated; a mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin hinge region polypeptide, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin fuse region polypeptide contains no cysteine residues. The binding domain-immunoglobulin fusion protein is completed, derived from (a) having 3 or more cysteine residues; where the mutated human IgG1 immunoglobulin fusion protein is completed of at least one immunoglobulin fusion protein is construct comprising the binding domain-immunoglobulin fusion protein is construct composition comprising the polymucleotide (operably linked to a promoter), a host cell transformed or transfected with a recombinant expression construct composition comprising the binding domain-immunoglobulin fusion protein, a partitude government fusion protein, a subject having a malignant condition or a B-cell disorder. The binding domain-immunoglobulin fusion protein is useful for treating a subject having or suspected of having a malignant condition or a B-cell disorder, e.g. melanoma, caratinoma or s
 ક
 Query Match
Best Local S
Matches 107
05-MAY-2005
 ADY19892
 Sequence 189
 ADY19892 standard;
 Disclosure; SEQ ID NO 196; 157pp; English
 181
 180
 121
 121
 al Similarity
107; Conserv
 61
 61
 Н
 QWICKKV 186
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSL-RILTNSLIQRCGAIHRNGLQASSCEVAL
 COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 Conservative
(first entry)
 protein; 189
 55.2%; Score
57.2%; Pred.
 25;
 Mismatches
 8
 568.5; DB 7;
No. 7.7e-53;
 54;
 Indels
 Length
 1;
 Gaps
 120
 60
```

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AAW88265
ID AAW8
XX
AC AAW8
AC AAW8
DT 29-W
XX
DE Huma
XX
KW Mast
KW infl
 RESULT 7
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 8
 Matches 107;
 Query Match
 The invention relates to an isolated nucleic acid encoding a PRO polypeptide. The polypeptide, agonist or an antagonist, antibody, composition, and method are useful for diagnosing and treating an related disorder, e.g. systemic lupus erythematosus, rheumatoid arthritis. The present sequence represents a PRO polypeptide.
 Antirheumatic; Antiarthritic; Osteopathic; Hemostatic; Antianemic; Antithyroid; Antidiabetic; Nephrotropic; CNS-Gen.; Hepatotropic; Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic;
 Mast cell function-associated antigen; MAFA; splice variant; human; inflammation; allergy; asthma; rheumatoid arthritis; tumour; therap;
 Human mast cell function-associated antigen (MAFA).
 Sequence 189 AA;
 Claim 8; SEQ ID NO 5698; 158pp; English.
 New nucleic acid encoding PRO polypeptide, useful for diagnosing and treating an immune related disorder, e.g. systemic lupus erythematos
 PRO
 AAW88265 standard; protein; 189
 rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus.
 treating
 Abbas A,
 11-AUG-2003; 2003US-0493546P
 11-AUG-2004; 2004WO-US026249
 Homo sapiens.
 Antiallergic; diagnosis.
 Antiinflammatory;
 (GETH) GENENTECH INC
 Local
 polypeptide SEQ ID
 180
 61
 61
 _
 1 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 Similarity
 QWICKKV 186
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
 COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNOEMS
 Clark H,
 55.2%;
ilarity 57.2%;
Conservative 2
 (first entry)
 Immune
 Ouyang
 ö
 disorder;
 5698
 25;
 Score 568.5; DB 9
 Williams MP,
 Mismatches
 Dermatological;
 DB 9;
 54;
 Wood
 Indels
 Length
 Immunosuppressive;
 189;
 erythematosus,
 ۲,
 Gaps
 immune
 179
 180
 60
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 Query Match
Best Local :
 Matches
 This is the amino acid sequence of human mast cell function- associated antigen (MAFA), a type II membrane glycoprotein. cDNA (see AAV84198) encoding human MAFA can be obtained from myslogenous leukaemic cell line KUB12 or cDNA derived from human lung tissue. The encoded protein is similar to the rat form (see AAW88277) having an intracellular domain containing a putative immunoreceptor tyrosine activation motif (ITIM) and an extracellular lectin-like domain. 2 Alternatively spliced forms (see AAW88266-67) of human MAFA have been identified. Polypeptides and synthetic peptides (see AAW88258-64) based on these truncated MAFA proteins can be used in methods for the treatment of inflammatory and allergic diseases, and tumour growth
 Хeу
 Modified-site
 Modified-site
 Homo
 New polypeptide having a sequence corresponding to human mast cell function-associated antigen - useful in forming and manufacturing pharmaceutical compositions in the treatment of inflammatory and a
 Modified-site
 Modified-site
 Peptide
 29-MAY-1998;
 03-DEC-1998
 WO9854209-A2
 Sequence
 Disclosure;
 diseases,
 sapiens
 1999-059806/05
181
 180
 121
 121
 61
 104;
 61
 EL,
 Ъ
 μ
 AAV84198
 PEPTIDE
 Similarity
 MADSSIYSTLELPEAPOVODESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYORIL
HGVCKKV 187
 LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 COGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
 | CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLIFPDNQGVK 120
 MTDSVÍÝSMLELPTÁTÓAÓNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLÝÓWÍL
 189 AA;
 QWICKKV 186
 LFGEYLGQDFYWIGLRNIDGWRWEGGPALSL-RILINSLIQRCGAIHRNGLQASSCEVAL 179
 and tumour growth
 Lamers MBAC,
 Fig 1; 44pp; English.
 Conservative
 97GB-00011148
 98WO-GB001572
 97. .99
/note= "As
137. .139
 /note=
 THERAPEUTICS
 /note=
 Location/Qualifiers
 notes
 . 67
 53.3%;
 "Asn is N-glycosylated"
 "Asn
 "ITIM motif"
 "Asn is N-glycosylated"
 "Asn is N-glycosylated"
 Lamont A,
 26;
 is N-glycosylated"
 Score 548.5; DB 2
Pred. No. 1.1e-50;
6; Mismatches 56
 Williams
 DB 2;
 56;
 Indels
 Length
 189;
 ۳
 Gaps
 and
 60
 60
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RESULT 8 AAE11759

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181

HGVCKKV 187

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 Matches 104;
 Query Match
Best Local (
 an agent which specifically binds to a mast cell function associated antigen (MARA) ligand on a target cell, and prevents or inhibits natural killer (MK)- or T-cell-expressed cell surface MARA from binding to MARA ligand and a pharmaceutically acceptable excipient. The invention is useful for inhibiting an NK- or a T-cell-expressed cell surface MARA binding to a ligand on a target cell, by contacting the pharmaceutical composition in vitro, ex vivo or in vivo by administering the composition to the subject, to NK or T-cell or the target cell e.g. tumour cell, in an amount sufficient to inhibit cell surface MARA binding to the ligand on the target cell. The agent or the composition is useful for treating a tumour by stimulating the cytotoxic activity of an NK cell or a cytotoxic T-cell (CTL), where the tumour comprises an NK cell- or CTL-susceptible tumour cell. The invention is also useful for inhibiting an activity of the tumour cell may be the tumour of the pharmaceutical the pharmaceutical and the pharmaceutical than a control of the pharmaceutical and the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the pharmaceutical than a control of the property
 Human; pharmaceutical composition; mast cell function associated antigen; MAFA; natural killer cell; NK; tumour; therapy; cytotoxic T-cell; CTL;
 Pharmaceutical composition for treating tumor by stimulating cytotoxic activity of natural killer cell or T-cell, comprises an agent that bind to mast cell function-associated antigen ligand on target cell.
 WO200170805-A2
 Human mast cell function associated antigen
 AAE11759 standard; protein; 189
 The present invention relates to a pharmaceutical an agent which specifically binds to a mast cell f
 17-MAR-2000; 2000US-0190716P
 16-MAR-2001; 2001WO-US008596
 27-SEP-2001
 Sequence 189
 Claim 10; Page 18; 49pp; English.
 Takahashi N,
 (GEMI-) GEMINI SCI
 .mmunosuppressive; cytostatic.
 2001-611482/70
 180
 121
 121
 61
 61
 \vdash
 1 MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
 유
 AAD18734.
 Similarity
 LFGEYLGODFYWIGLRNIDGWRWEGGPALSL-RILTNSLIQRCGAIHRNGLQASSCEVAL 179
 ĊQĠŚNYŚTĊASĊÞŚĊÞDRŴMKYĠNĤĊŶŶĖŚVĖEKĎŴŃŚŚĹEFĊLARDŚHĽĹVITDNQEMS
 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNOGVK 120
 QWICKKV 186
 LLQVFLSEAFCWIGLRNINSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
 MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
 Conservative
 A,
 T-cell. The present sequence is human MAFA protein
 (first entry)
 Mikayama
 55.6%;
 H
 26;
 Score 548.5; DB 4
Pred. No. 1.1e-50;
6; Mismatches 56
 DB 4;
 (MAFA)
 cell function associated
 56;
 composition comprising
 Indels
 Length
 protein
 1:
 that binds
 Gaps
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RESULT 9
AEA89021
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 Query Match
Best Local S
Matches 45
 The present invention relates to a method of producing transgenic animal having modified resistance to a disease. The method involves introducing retrovirus having polynucleotide sequence encoding protein that modifies disease resistance of animal, into cell of animal. The invention is useful for screening proteins capable of modifying resistance of an animal to a disease, for producing transgenic bird and fish and also useful in gene therapy. The present sequence is the chicken major histocompatibility complex (MHC) C-type lectin receptor, B-lec protein. This sequence is used to produce a transgenic animal having modified
 Sequence 188 AA;
 Disclosure;
 Producing
 Carroll M, Kaufman
 05-DEC-2003; 2003GB-00028248
 03-DEC-2004; 2004WO-GB005108
 16-JUN-2005
 WO2005054280-A2
 Gallus gallus.
 Transgenic
lectin; maj
 Chicken MHC
 25-AUG-2005
 AEA89021;
 AEA89021 standard; protein; 188
 introducing
 (OXFO-)
 modifies
 2005-425385/43.
 171
 182
 115
 128
 55
 71
 1
 ω
 45;
 nic animal; disease-resistance; gene therapy major histocompatibility complex; receptor.
 OXFORD BIOME
INST ANIMAL
 Similarity
 AEA89020.
 VCTK 174
 ICKK 185
 SSPHWVGLSR-EGKEHPWEWVNRSPLSHLFQVQGDGL---CAYLGDAGLSSSHCSARRNW
 QDFYWIGLRNIDG----WRWEGGPALS--LRILTNSLIQRCGAIHRNGLQASSCEVALQW
 HPQPCAQCPFDWIGFRGKCYYFSEDESNWTSSQNNCSALGASLAVFDSAEDLSFTWRHKG
 EVREYPHVLG-TEWSRREGPSRGACVTFQLTMAAVFTVLLITAVAF-----AVQAFQP
 ELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKDSTCS
 transgenic animal having modified resistance to disease, ng retrovirus having polynucleotide sequence encoding profies disease resistance of animal, into cell of animal.
 to a disease
 C-type lectin receptor,
 SEQ ID NO
 Conservative
 (first
 CPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLG
 BIOMEDICA UK LTD
NIMAL HEALTH.
 15.8%; Sco
24.5%; Pro
ative 29;
 Ģ
 entry)
 8; 90pp; English.
 Mitrophanous
 Score 162.5; DB 9
Pred. No. 6.6e-09;
9; Mismatches 89
 ₽
 B-lec protein.
 gene therapy;
 ; 68
 9;
 Length 188;
 Indels
 screening; B-lec;
 21;
 protein
 Gaps
 à
 181
 114
 127
 54
 70
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RESULT 10

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14-JUL-2000

26-JUL-2000

14-AUG-2000

15-AUG-2000

22-AUG-2000

23-AUG-2000

23-AUG-2000

21-SEP-2000

01-SEP-2000

 antianemic; antirheumatic; antisclerotic; cardiant; vascular; cerebroprotective; thrombolytic; antimicrobial; ophthalmic; cytostatic; antialzheimers; immune/autoimmune disease; HIV infection; anaemia; human immunodeficiency virus; rheumatoid arthritis; multiple sclerosis; cancers; hyperproliferative disorder; breast neoplasm; melanoma; sezary syndrome; Gaucher's disease; neurological diseases; Alzheimer's disease; Parkinson's disease; cardiovascular disorder; cardiac arrest; tachycardia; angina; infection; corneal infections; wound healing; immunogen; gene therapy; antisense; food additive.
 11-JUL-2000;
11-JUL-2000;
 30-JUN-2000;
07-JUL-2000;
 18-APR-2000;
19-MAY-2000;
 Human novel extracellular matrix protein,
 AAU19837;
 AAU19837 standard; protein; 189
 28-JUN-2000;
 17-JAN-2001;
 WO200155368-A1
 Homo sapiens.
 Human; secreted extracellular matrix protein; immunomodulatory; Anti-HIV;
 2000US-0189874P
2000US-0189874P
2000US-0199076P
2000US-0199076P
2000US-02055153P
2000US-0215135P
2000US-02116647P
2000US-02174886P
2000US-0217487P
2000US-0217487P
2000US-022964P
2000US-02252119P
2000US-0225266P
2000US-02252675P
2000US-02252757P
2000US-0225759P
 2001WO-US001348
 (first entry
 2000US-0180628P
 2000US-0179065P
 Seq
 ID No
 487
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14-SEP-2000;
14-SEP-2000;
21-SEP-2000;
21-SEP-2000;
25-SEP-2000;
25-SEP-2000;
27-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
20-CCT-2000;
20-CC
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08-SEP-2000;
08-SEP-2000;
 14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
14-SEP-2000;
 08-SEP-2000;
12-SEP-2000;
14-SEP-2000;
 ; 2000US-0231243P.
2000US-0231244P.
2000US-0231413P.
2000US-0231414P.
2000US-0232080P.
2000US-0232080P.
2000US-023208P.
2000US-023297P.
2000US-024937P.
2000US-024178FP.
2000US-024178FP.
2000US-024188PP.
2000US-0244617P.
2000US-024647FP.
2000US-024647FP.
2000US-024647FP.
2000US-024647PP.
2000US-024647PP.
2000US-024647PP.
2000US-024677P.
2000US-024677P.
2000US-024678P.
2000US-024678P.
2000US-024652FP.
2000US-024652FP.
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2000US-024651P.
2000US-024651P.
2000US-024951P.
2000US-024921P.
 2000US-0236368P.
2000US-0236369P.
2000US-0236370P.
2000US-0236802P.
 2000US-0234998P.
2000US-0235484P.
2000US-0235834P.
2000US-0235835P.
2000US-0235835P.
2000US-0236327P.
 2000US-0232399P
2000US-0232409P
2000US-0232400P
2000US-0232401P
2000US-0233063P
2000US-0233064P
2000US-0233063P
2000US-0233063P
 2000US-0237040P.
2000US-0239935P.
 2000US-0237037P.
2000US-0237038P.
 2000US-0234274P.
2000US-0234997P.
 2000US-0237039P.
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17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
01-DEC-2000;
01-DEC-2000;
05-DEC-2000;
05-DEC-2000;
05-DEC-2000;
05-DEC-2000;
06-DEC-2000;
08-DEC-2000;
 Rosen CA,
 (HUMA-)
 HUMAN
 Barash SC,
 2000US-0251030P.
2000US-0251988P.
2000US-0256719P.
2000US-0251479P.
2000US-0251856P.
2000US-0251869P.
2000US-0251869P.
2000US-0251989P.
2000US-0254097P.
2001US-0259678P.
 2000US-0249264P.

2000US-0249265P.

2000US-0249297P.

2000US-0249299P.

2000US-0249290P.

2000US-0259300P.

2000US-0250391P.

2000US-0251030P.
 GENOME
 SCI INC
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N-PSDB; AAS31408. 2001-465572/50.

Nucleic acid molecules encoding human secreted extracellular matrix proteins, used in preventing, treating or ameliorating a disorder, & Alzheimer's and Parkinson's diseases and cancers. Ф. Ġ

Claim 11; SEQ ID NO 487; 577pp; English.

CC probes in diagnostic assays. The polynucleotides may also be used as DNA CC probes in diagnostic assays. The SPS may also be used as antigens to CC probes in diagnostic assays. The SPS may also be used as antigens to CC produce antibodies and to identify modulators (agonists and antagonists) CC of the SPS. The anti-(SP) antibodies and antagonists may also be used to CC detecting the presence of SPs in samples. The disorders include for CC detecting the presence of SPs in samples. The disorders include for CC detecting the presence of SPs in samples. The disorders include for CC discasses infections, anaemia, rheumatoid arthritis and multiple sclerosis), CC virus) infections, anaemia, rheumatoid arthritis and multiple sclerosis), CC diseases (e.g. Alzheimer's diseases (e.g. melanomas, neoplasms of CC diseases (e.g. Alzheimer's disease, parkinson's disease), neurological CC diseases (e.g. Alzheimer's disease, parkinson's disease) cardio-CC (cerebrovascular disorders (e.g. cardiac arrest, tachycardia and angina), CC (coreal infections). Other uses include wound healing, maintenance CC (e.g. corneal infections). Other uses include wound healing, maintenance CC of organs before transplantation, support of cell culture of primary human secreted extracellular matrix proteins (SPs). The polynucleotides and proteins are used to prevent, treat a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. For example, disorders associated with decreased expression of SPs. The SP polynucleotide or a vector expressing them may be administered to treat diseases by gene therapy. Antisense molecules may be administered to down genes and regulate expression of SPs by binding with the cells own genes and services are their contractions and services are serviced as a new service of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the cells of the c The invention relates to relates to isolated nucleic acid molecules encoding novel extracellular matrix proteins (SPs). The polynucleotides down

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S
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 S
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 8
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 S
 Matches
 64
 30
 43;
 N
 EVALQWICKKVLY 188
 KELEFMFKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTEC
 QGVKLFGEYLGQDFYWIGLRNI-DGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSC
 ----ASKG--CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQ 116
 RILCCGSKDSTCSHCPS-CPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDN 116
 STAVAAALELVDPPGCRNSARDEGSTSWKAALE--
 ADSSIYSTLELPEAP----QVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQ
 Conservative
 30;
 Score 152; DB 4;
Pred. No. 9.2e-08;
0; Mismatches 80
 175
 57
 63
```

Query Match Best Local (

Similarity

14.8%; 22.3%;

,08

40;

Gaps

9

Length 189; Indels

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RESULT 11
ABB17910
 밁
16-MAR-2000

17-MAR-2000

18-APR-2000

19-MAY-2000

07-JUN-2000

28-JUN-2000

07-JUL-2000

11-JUL-2000

11-JUL-2000

11-JUL-2000

14-JUL-2000

14-AUG-2000

14-AU
 31-JAN-2000;
04-FEB-2000;
24-FEB-2000;
02-MAR-2000;
16-MAR-2000;
17-MAR-2000;
 Human; nootropic; neuroprotective; cytostatic; dermatological; virucide; immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary; antiparkinsonian; antisikkling; antianaemic; antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective; antiinflammatory; antiallergic; antidiabetic; antiulcer; anciconvulsant; antifungal; antiparasitic; cardiant; immune disorder; cardiovascular disorder; antiparasitic; cardiant; immune disorder; cardiovascular disorder;
 Homo
 17-JAN-2001;
 16-AUG-2001
 WO200159063-A2
 neurological
 ABB17910;
 ABB17910
 Human nervous
 23-JAN-2002
 sapiens.
 176
 : |:| |: |
LMTRPWVCSKMAY 188
 standard;
2000US-0180628P.
2000US-0184664P.
2000US-0189874P.
2000US-0198125P.
2000US-0205159.
2000US-02148867P.
2000US-02148879.
2000US-02148879.
2000US-0218999.
2000US-0218999.
2000US-0218999.
2000US-0218999.
2000US-0224519P.
2000US-0225213P.
2000US-0225213P.
2000US-0225213P.
2000US-02252149.
2000US-0225213P.
2000US-0225313P.
2000US-0225313P.
2000US-0225313P.
2000US-0225313P.
2000US-0225313P.
2000US-0225313P.
2000US-0223343P.
2000US-0223345P.
2000US-02233443P.
 disease;
 (first
 2001WO-US001334
 system related
 protein;
 entry)
 infection; nephrotropic;
 189
 polypeptide SEQ
 ጀ
 ID NO
 gene
 6567.
 therapy; vaccine.
 06-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
08-SEP-2000
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21-NOV-2000
2000US-0231244P
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2000US-023363P
2000US-023423P
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2000US-023636P
2000US-023636P
2000US-023636P
2000US-023636P
2000US-023636P
2000US-0241809P
2000US-0241809P
2000US-0241809P
2000US-0241785P
2000US-024677P
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                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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01-DEC-2000;
01-DEC-2000;
05-DEC-2000;
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05-DEC-2000;
06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
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17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acids encoding useful for preventing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; SEQ ID NO 6567; 1701pp +
                                                                                                                                                                                                                                                                                               Sequence 189 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention
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DB; ABA14236.
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                                                                                                                                RILCCGSKDSTCSHCPS-CPILMTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDN
                                                                                 QGVKLFGEYLGQDFYWIGLRNI-DGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSC
                                                                                                                                                                           SSTAVAAALELVDPPGCRNSARDEGSTSWKAALE------
                                                                                                                                                                                                        ADSSIYSTLELPEAP----QVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQ
LMTRPWVCSKMAY 188
                            EVALQWICKKVLY 188
                                                                                                                ----ASKG--CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQ
                                                         KELEFMFKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTEC
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2000US-0259391P.
2000US-0251160P.
2000US-025130P.
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2000US-025130P.
2000US-0251479P.
2000US-0251868P.
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2000US-0251990P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ruben
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genes (ABA11004-ABA21534) and proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s system antigen polypeptides, treating nervous system cancers
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RESULT 12

ABP48057

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14-AUG-2000;
22-AUG-2000;
30-AUG-2000;
01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
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21-SEP-2000;
21-SEP-2000;
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22-SEP-2000;
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   2000US-022575P
2000US-0225758P
2000US-0226868P
2000US-022934P
2000US-0229344P
2000US-0229349P
2000US-02293497
2000US-023423P
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2000US-0216847P.
2000US-0217487P.
2000US-0217496P.
2000US-021829963P.
2000US-022963P.
2000US-0224518P.
2000US-0224518P.
2000US-0225267P.
2000US-0225270P.
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2000US-022527447P.
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2000US-0180628P.
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RESULT 13
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17-NOV-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid encoding human proteins, useful for diagnosis, treatment and prevention of e.g. osteoporosis, also related polypeptides and antibodies.
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Extracellular matrix protein; cytostatic; antibacterial; virucide;
                                      Human protein
                                                                                 18-DEC-2003
                                                                                                                          ADC11019;
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DB; ABQ66732.
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                                                                                                                                                                   standard;
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; 2000US-0249299P.
; 2000US-0251856P.
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; 2000US-0251869P.
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                                                                                 entry)
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    14-AUG-2000

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUN-2000

07-JUL-2000

07-JUL-2000

11-JUL-2000

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02-MAR-2000;
16-MAR-2000;
17-MAR-2000;
18-APR-2000;
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14-AUG-2000;
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14-AUG-2000;
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                   2000US-0190076

2000US-019139

2000US-0205519

2000US-0215135

2000US-0215135

2000US-021647p

2000US-0217486p

2000US-0217487p

2000US-0217487p

2000US-022513p

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2000US-0225213p

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14-SEP-2000; 14-SEP-2000; 14-SEP-2000;

2000US-0232401P. 2000US-0233063P. 2000US-0233064P. 2000US-0233065P.

2000US-0234273P
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2000US-023499P
2000US-023499P
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RESULT 14
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ID AAM78
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AC AAM78
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cc their fragments, epicopes and homologues), an isolated antibody that cc binds specifically to the protein, diagnosing a pathological condition or susceptibility to a pathological condition (comprising determining the presence or absence of a mutation in the nucleic acid and diagnosing a condition based on the presence or absence of the mutation), diagnosing a condition based on the presence or absence of the mutation), diagnosing a condition based on the presence or amount of expression of the cc (comprising determining the presence or amount of expression of the protein in a biological sample and diagnosing a condition based on the cc protein in a medical condition by administering he nucleic acid or crivity in a biological assay (comprising expression of the grotein, the gene corresponding to the cDNA sequence, and identifying an activity in a biological assay (comprising expressing the nucleic acid in a cell, isolating the supernatant, detecting an activity in a biological assay and identifying the protein in the supernatant having the cacid in a cativity). The nucleic acids and proteins display the following cativities Cytostatic, antibacterial, Virucide, Neuroprotective, CC Gynaecological, Gastrointestinal-Gen, Cardiant, Cardiovascular-Gen, Respiratory-Gen,
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Best Local 8
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08-DEC-2000;
08-DEC-2000;
11-DEC-2000;
05-JAN-2001;
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                                AAM78675
                                                                                   AAM78675 standard;
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DB; ADC10754.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14.8%;
Similarity 22.3%;
13; Conservative 3
                                                                                                                                                                                                                                                                                                                                               KELEFMFKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTEC
                                                                                                                                                                                                                                                                                                                                                                                               QGVKLFGEYLGQDFYWIGLRNI-DGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSC 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----ASKG--CIKCEAPCPEDWLLYGRKCYFFSEEPRDWNTGRQYCHTHEAVLAVIQSQ 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RILCCGSKDSTCSHCPS-CPILWTRNGSHCYYPSMEKKDWNSSLKFCADKGSHLLTFPDN
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2000US-0251868P.

2000US-0251869P.

2000US-0251989P.

2000US-0251990P.

2000US-0254099P.

2001US-0259678P.

2001US-00764870.
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Z
                                                                                      protein;
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                                                                                         188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 152; DB 7;
Pred. No. 9.2e-08;
0; Mismatches 80
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08-NOV-2000; 08-NOV-2000; 17-NOV-2000;

2000US-0241721P.
2000US-0241785P.
2000US-0241785P.
2000US-0241809P.
2000US-0246474P.
2000US-0246474P.
2000US-02464778P.
2000US-02464778P.
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2000US-0246528P.
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2000US-024651P.
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2000US-024651P.
2000US-024661P.
2000US-024661P.
2000US-024921P.
2000US-02492P.
2000US-025093P.

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114-SEP-2000;
21-SEP-2000;
25-SEP-2000;
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26-SEP-2000;
27-SEP-2000;
29-SEP-2000;
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29-CCT-2000;
02-CCT-2000;
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03-NOV-2000;
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2000US-0239937P. 2000US-0240960P. 2000US-0237040P. 2000US-0239935P.

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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tang
Ma Y,
                                                                                                                                                                                                                                                                   Sequence 188 AA;
                                                                                                                                                                                                                                                                                                           treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111 (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 20; Page 3580; 6221pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acids encoding polypeptides with cytokine-like activities, useful in diagnosis and gene therapy.
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20-OCT-2000;
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01-SEP-2000;
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20-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nervous system disorder; arthritis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue growth factor; immunomodulatory; cancer; leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; cytokine;
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                                                                                                                                                                                                                                                                                               sequence listing were missing at the time of publication
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, Zhao QA, Wang D, V
AJ, Yang Y, Wejhrman
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182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ytokine; cell proliferation; cell differentiation; gene th peptide therapy; stem cell growth factor; haematopoiesis;
ICKK 185
                           EKYFIGLIYHREEKRWRWINNSVFNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR 181
                                                       DFYWIGL----RNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGL----QASSCEVALQW
                                                                                      RSYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDA
                                                                                                                CSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLGQ
                                                                                                                                               MIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT
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Wang D, Wang
Wejhrman T,
                                                                                                                                                                                                                      13.9%;
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                                                                                                                                                                                                                      Score 143.5; DB 4; Pred. No. 7.6e-07;
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JJ, Zhang
Goodrich R
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J, Ren F,
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Chen
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                                                                  anaphylaxis, hepatitis, multiple sclerosis, cancer, coronary artery disease, malaria, atopic dermatitis, amyotrophic lateral sclerosis, meningitis, attention deficit disorder, Crohn's disease, gastroenteritis, goitre, hypoglycaemia, diabetes mellitus, endometriosis, pulmonary embolism and muscular dystrophy. Antibodies to disorders such as these can be made by providing a polypeptide of the invention to an immunocompetent vertebrate and harvesting blood or serum from the vertebrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; INTERCEPT 289; T cell; heart; liver; pancreas; placenta; brain; skeletal muscle; kidney; spleen; lymph node; peripheral blood leukocyte; bone marrow; thymus tissue; abnormal blood coagulation; asthma; cancer; anaphylaxis; hepatitis; multiple sclerosis; coronary artery disease; malaria; atopic dermatitis; amyotrophic lateral sclerosis; meningitis; attention deficit disorder; Crohn's disease; gastroenteritis; goitre; hypoglycaemia; diabetes mellitus; endometriosis; pulmonary embolism;
                                                                                                                                                                                                                                                                                                   movement/migration of, e.g. T cells and cells of the heart, liver, pancreas, placenta, brain, lung, skeletal muscle, kidney, spleen, lymph node, peripheral blood leukocyte, bone marrow or thymus tissue. They can be used as modulating agents for regulating cellular processes, thus, the proteins and their associated nucleic acids can be used to prognosticate, prevent, diagnose, or treat disorders associated with physiological processes. These disorders include abnormal blood coagulation, asthma,
       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence represents human INTERCEPT 289 form la polypeptide. The protein and similar others exhibit the ability to affect growth, proliferation, survival, differentiation, activity, morphology, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 8; Fig 2A-2B; 263pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid molecule for diagnosis, prevention, and therapy of human and other animal disorder, or as modulating agent for regulating
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Query Match

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Search completed: January 9, 2006, 15:30:26 Job time : 89.5115 secs
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                                                                                       182 ICEK 185
                                                                  182 ICKK 185
                                                                                                                                                                               65 RSYGTVCPKDWEFYQARCFFLSTSESSWNESRDFCKGKGSTLAIVNTPEKLKFLQDITDA 124
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Result
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Copyright (c) 1993 - 2006
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I59421
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A;Molecule type: mRNA
A;Residues: 1-188 <RES>
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UNIPROT:Q64335; UNIPARC:UPI0000030101; EMBL:X79812; NID:g1020141;

Length 188;

ALIGNMENTS

09-Jul-2004

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RESULT 2

823149
C; Species: Shigella flexneri
C; Date: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 09-
C; Accession: S23149
R; Close, S.M.; Kado, C.I.
submitted to the EMBL Data Library, March 1992
A, Description: A gene near the plasmid pSa origin of replication en A; Reference number: S23149
A, Accession: S23149
A, Accession: S23149
A, Residues: 1-189 < CLO>
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80.7%; Pred. No. 9.2e-75;
tive 15; Mismatches 21
                                                                                                                                                            #text_change 09-Jul-2004
                                                                                   replication encodes a nuclease
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hypothetical protein HP0061 - Helicobacter pylori (strain 26695)

(;Species: Helicobacter pylori

(;Species: Helicobacter pylori

(;Date: 09-Aug-1997 #sequence_revision 09-Aug-1997 #text_change 09-Jul-2004

(;Accession: E64527

R;Tomb, J.F.; White, O.; Kerlavage, A.R.; Clayton, R.A.; Sutton, G.G.; Fleischmann, Peterson, S.; Loftus, B.; Richardson, D.; Dodson, R.; Khalak, H.G.; Glodek, A.; McK

son, J.D.; Kelley, J.M.; Cotton, M.D.; Weidman, J.M.; Fujii, C.; Bowman, C.; Watthey

Nature 388, 539-547, 1997

A;Authors: Wallin, E.; Hayes, W.S.; Borodovsky, M.; Karpk, P.D.; Smith, H.O.; Fraser

A;Title: The complete genome sequence of the gastric pathogen Helicobacter pylori.

A;Reference number: A64520; MUDI:97394467; PMID:9252185

A;Accession: E64527
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E64527
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C;Superfamily:
                      A; Molecule type: DNA
A; Residues: 1-189 < TOM>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, A;Title: Complete Genome Sequence of a virulent isolate of Streptococcus A;Reference number: A95000; MUID:21357209; PMID:11463916
A;Accession: A95110
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R;Tettelin, H.; Nelson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acetyltransferase, GNAT family [imported] - Streptococcus pneumoniae (strain C;Species: Streptococcus pneumoniae C;Date: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 31-Dec-2004
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    A;Cross-references:
                                                             A; Status: preliminary; nucleic acid sequence not
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10 LELPE-APQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKDST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TNSLIQRCGAIHRNGLQASSCEVALOWICKK 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DAEAMFDYASDKGNTRYTFPTNQSLEETKNNIAQ-FY---LANPLG-RW------GIELK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLGQDFYWIGLRNIDGWRWEGGPALSLRIL 154
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                                                                                                                                                                                                                                                                                                                                                                                                                                               SNG--QFIGTIDLHKIDSVLKKAAIGYIINK 105
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.3%; Score 54.5; DB 2; llarity 26.4%; Pred. No. 6.2e+02; Conservative 16; Mismatches 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
  UNIPROT: 024901; UNIPARC: UPI00000C07D9; GB: AE000528; GB: AE000511;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2;
                                                                  shown; translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35;
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                                                                                                                                  P.D.; Smith, H.O.; Fraser, gen Helicobacter pylori.
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Watthey, L.
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C;Accession: G87336
C;Accession: G87336
R;Nierman, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J. B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolon B.; Laub, M.T.; DeBoy, R.T.; Dodson, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M. n. J.; Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M. Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: A87249; MUID:21173698; PMID:11259647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
G87336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Maley, G.F.; Guarino, D.U.; Maley, F.
J. Biol. Chem. 258, 8290-8297, 1983
A;Title: Complete amino acid sequence of an allosteric enzyme,
A;Reference number: A01011; MUID:83238442; PMID:6345541
A;Accession: A01011
                                                                                                                          A;Gene:
                                                                                                                                                                 A;Cross-references: UNIPROT:Q9AAA0; UNIPARC:UPI00000C7138; GB:AE005673; NID:g13421929;
                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-188 <STO>
                                                                                                                                                                                                                                         A;Status: preliminary
                                                                                                                                                                                                                                                               A; Reference number: A87249; A; Accession: G87336
                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       conserved hypothetical protein CC0706 [imported] - Caulobacter crescentus C;Species: Caulobacter crescentus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein A; Residues: 1-188 < MAL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Date: 27-Nov-1985 #sequence_revision 27-Nov-1985 #text_change 09-Jul-2004 C;Accession: A01011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Note:
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N;Alternate names: deoxycytidylate
                                                  Query Match
Best Local (
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Best Local
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                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 5.2%; Score 53; DB 1; l Similarity 19.8%; Pred. No. 8.7e+02; 16; Conservative 10; Mismatches 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23;
                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EYLGODFYWIGLRNIDGWRWE 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TLSPCPDCAKAIAQSGIKKLVYCETYDKNKPGWDDILR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCSHCPSCPILWTRNG----SHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ERGETLEVRPTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KDWNLSLKI-EDKRSNSL----GNGTKKLLTNADLGSDYKTIVIDSMKTYHQSQQEKYKR 153
                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                  5.2%;
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                            Score 53; DB 2
Pred. No. 8.7e+
7; Mismatches
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Pred. No. 7.8e+02;
9; Mismatches 25
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DB 2;
8.7e+02;
% 35;
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                                                                        Length
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PEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKDSTCSHC 72

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C;Species: Caenorhat
C;Date: 15-Oct-1999
C;Accession: T19559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probable 21.7K protein - vaccinia virus (strain Ankara) (Species: vaccinia virus (species: vaccinia virus (species: vaccinia virus A; Variety: strain Ankara A; Variety: strain Ankara C; Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_chan C; Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_chan C; Accession: T37454
R; Antoine, G.; Scheiflinger, F.; Falkner, F.G.; Dorner, F. submitted to the EMBL Data Library, March 1997
A; Description: The complete genomic sequence of the Modified A; Description: The complete genomic sequence of the Modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein C29F3.4 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #t
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A; Residues: 1-189 <WIL>
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A;Residues: 1-188 <ANT'>
A;Cross-references: UNIPARC:UPI00000ED2E4; EMBL:U94848; PIDN:AAB96558.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Accession: T37454
A;Status: preliminary; translated from
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                                                                                                                                                                                                                                                                                                                                                       Note: MVA189R
                                                                                                                                                                                                                                                                                                                                                                                          Experimental source: strain Ankara
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              102
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PSCPILWTR----NGSHCYYFSMEKKDWNSSLKFC-ADKGSHLLTF 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAAPQLYDPPAWGRHA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PVCPAGWFQFQRATGLWCYIFATPGAGWTTPQAACQANYGANLNGF
                RLLISFRIDATELFGGELKDSLPWRSLND
                                                                                           SLNTVADVRHCLTEYILWV-----
                                                                                                                                S----TCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQG---
                                                                                                                                                                        SQYDITLIPHPQPIKKWKLKPSISINGYRSTFTMA-----FPCAQFRPCHCHATKD
                                                                                                                                                                                                             STLELPEAPOVODESRWKLK-AVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKD 66
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nilarity 30.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                000 #sequence_revision 21-Jan-2000 #text_change
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                                                 -----VKLFGEYLGODFYWIGLRN 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                        5.0%;
19.5%;
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Pred. No. 9.8e+02;
6; Mismatches 21;
                                                                                                                                                                                                                                                                        Score 51.5; DB 2;
Pred. No. 1.2e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----AMLLVWLAFILLPTANAPAGRIKATLRH-
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                                                                                                                                                                                                                                                                                        Length 188;
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                                                                                               SHRWTHRESAGSLY 101
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  R;Shirai, M.; Hirakawa, H.; Kimoto, M.;
Nucleic Acids Res. 28, 2311-2314, 2000
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Nucleic Acids Res. 28,
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conserved hypothetical protein spr0855 [imported] - Streptococcus pneumoniae (strai C;Species: Streptococcus pneumoniae C;Species: Streptococcus pneumoniae C;Species: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 31-Dec-2004 C;Accession: G97978
C;Accession: G97978
R;Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, L.; Burgett, S.; DeHoff, B. e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren, e, R.; Jun, P.M.; Winkler, M.E.
J. Bacteriol. 183, 5709-5717, 2001
J. Bacteriol. 183, 5709-5717, 2001
A;Authors: Yang, Y.; Young-Ballido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas, A;Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A;Reference number: A97872; MUID:21429245; PMID:11544234
A;Accession: G97978
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G97978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probable membrane protein L2759.13 [imported] - Leishmania major (strain Friedlin) C;Species: Leishmania major (c;Species: Leishmania major (c;Date: 24-Mar-1999 #sequence revision 24-Mar-1999 #text_change 09-Jul-2004 (c;Date: 24-Mar-1999 #sequence revision 24-Mar-1999 #text_change 09-Jul-2004 (c;Date: 24-Mar-1999 Tocal C;Accession: A81459; TO2821 (c;Accession: Acad. Sci. U.S.A. 96, 2902-2906, 1999 A;Title: Leishmania major Friedlin chromosome 1 has an unusual distribution of protein-A;Reference number: A81455; MUID:99178987; EMID:10077609 A;Accession: A81459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics:
A;Gene: spr0855
A;Gene: spr0855
C;Superfamily: ribosomal protein serine N-acetyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-189 < KUR:
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                                    hypothetical protein yggE [imported] - Chlamydophila pneumoniae (strain J13) C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae (C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:Q25351; UNIPARC:UPI000007E819; A;Experimental source: strain MHOM/IL/81/Friedlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:Q8DQ42;
                  C; Accession: C86508
                                                                                                                        C86508
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Best Local
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                                                                                                                                                                                                                                                                                                                       94 KDPNRQRVPAELHRSNQTAVEDAEKISRVFCVFLLLLFGGLLYVLNPFQSDPYGRPDGYG 153
                                                                                                                                                                                                                                                                                                                                                                           19 QDESRWKLKAVLHRPH-----LSRFAMVALGLLTVILMSLL----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1-189 <PYL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                           MTERKLVYGSSDLACNNSSS 173
                                                                                                                                                                                                                                                                          MYQRILCCGSKDSTCSHCPS
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                                                                                                                                                                                                                                                                                                                                                                                                                          5.0%; Score 51; DB 27.5%; Pred. No. 1.40 tive 11; Mismatches
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Pred. No. 1
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Tabuchi,
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1.2e+03;
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  Kishi,
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  'EJ
     Ouchi,
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                                                                                                   (strain J138)
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       Shiba,
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A;Cross-references: UNIPROT:Q9Z944; UNIPARC:UPI00000D4127; GB:AE001600; GB:AE001363; NII A;Bxperimental source: strain CWL029
R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, O.; Hickey, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzberg, Nucleic Acids Res. 28, 1397-1406, 2000
A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumoniae AR39.
A;Reference number: A81500; MUID:20150255; PMID:10684935
A;Accession: E81555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: DNA
A;Residues: 1-188 <REA>
A;Cross-references: UNIDARC:UPI00000D4127; GB:AE002221; GB:AE002161; NID:g7189543; PIDN
A;Experimental source: strain AR39, HL cells
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A; Cross-references: UNIPROT: Q7LZI1; UNIPARC: UPI000017387C
                     A; Molecule type: protein A; Residues: 1-188 <OHK>
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A; Residues: 1-188 <STO>
                                                                  A; Accession: JC2393
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Best Local :
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Pred. No. 2.4e-
3; Mismatches
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Pred. No. 2.
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.4e+03;
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.4e+03;
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-188 <KAW>
                                                              R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y. awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, DNA Res. 6, 83-101, 1999
A;Title: Complete genome sequence of an aerobic hyper-thermophilic C1 A;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: A72745
                                                                                                                                                                                                        hypothetical protein APE0488 - Aeropyrum pernix (strain K1) C;Species: Aeropyrum pernix C;Decies: Aeropyrum pernix C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004 C;Accession: A72745
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RESULT 14
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                                                                문
                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:Q9TZ75; UNIPARC:UPI000007BD20; EMBL:AF099919; PIDN:AAC68804. A;Experimental source: strain Bristol N2; clone F40G9
                                                                                                                                                                                                                                                                                                                                                                                                                                              hypothetical protein F40G9.10 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #te
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A; Residues: 1-188 < GRA>
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19; Conserv
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32; Conserv
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VNSKTNYVMIGLIFENRE-WSWTDGSSVN
                                -----DFYWIGL--RNIDGWRWEGGPALS 150
                                                                 WFSYTNFCYKSTARAANFNDAHNACRSEGSELASIHSLTENQ---
                                                                                                 WTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLL---TFPDNQGVKLFGEYLGQ-----
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                                                                                                                                Score 47.5; DB
Pred. No. 3e+03;
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Y.; Jin-no,

Y.; Yamazaki,

Crenarchaeon,

Aeropyı Takah J.; K

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A;Cross-references: UNIPROT:Q9YEU3; UNIPARC:UPI000005DB7A; DDBJ:AP000059; NID:g5103911; C;Genetics:
A;Experimental source: strain K1
C;Genetics:
A;Gene: ApE0488
C;Superfamily: Aeropyrum pernix hypothetical protein APE0488
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Result
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Maximum DB
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score greater than or equal to the score of the result being printed,
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Q60SU3_CAEBR
Q60DR9_HUMAN
Q9W3DB_DROME
Q86LZ9_MYTED
Q5LMQ7_SILPO
Q8ECZ1_SHEON
Q6NIX4_RHOPA
Q4V649_DROME
Q60J81_HUMAN
Q4KBE0_PSEF5
Q8MFCZ_HUMAN
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Q4KBE0_PSEF5
Q8MFCZ_HUMAN
Q5A_SHIFL
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Q97R76_STRPN
Q99R75_ENTHI
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Q64335_RAT
O75613_HUMAN
O43198_HUMAN
Q6ZYP3_CHICK
Q6ZYP6_CHICK
CLC5A_HUMAN
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161:645 357; AAD 3727; AAC 7727; AAC 7751; CAA 1; 186E. 65294; K. 65294; C:1 66; P:6 67; P:6 67; C:1 68; P:6 67; C:1 68; C:1 6	DE SEQUENCE. 29/SvevTACfBr; ' 29/SvevTACfBr; ' 21115136; PubMei er D., Kaufmann structure, alt ell lectin-like "; "; pell lectin-like netics 52:206-2: DE SEQUENCE. por77501; PubMei ctivated CD8 To cclivated CD8 To	Murinae, Musinae, Mus	USE PRELIMINARY, 98 (TremBLrel. 1) 99 (TremBLrel. 3) 05 (TremBLrel. 3) function-associ fun	
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Proc. Natl. Acad. Sci. U.S.A. 92:9397-9401(1995).
Proc. Natl. Acad. Sci. U.S.A. 92:9397-9401(1995).
EMBL; X97191; CAA65829.1; -; Genomic_DNA.
EMBL; X79812; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97192; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97193; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97194; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97195; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97195; CAA65829.1; JOINED; Genomic_DNA.
EMBL; X97195; CAA65829.1; JOINED; Genomic_DNA.
PIR; I59421; I59421.
HSSP; P26718; IKCG.
Ensembl; ENSENOGO0000014918; Rattus norvegicus.
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                                          GO; GO:0005529; F:sugar binding; InterPro; IPR001304; Lectin_C. Ffam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
PROSITE; PS50041; C TYPE LECTIN ; SEQUENCE 188 AA; 21356 MW; 20
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Guthmann M.D., Tal M., Pecht I.;
"A secretion inhibitory signal transduction
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"Analysis of the gene encoding the mast cell function-associated antigen and its alternatively spliced transcripts.";
J. Immunol. 158:3235-3243(1997).
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Mammalia; Eutheria; Euarchontoglires; Glires;
Muridae; Murinae; Rattus.
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CHAIN 2
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GO; GO:0004872; F:receptor activity; IE
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
Pfam; PF00059; Lectin C; 1.
SMART; SM00034; CLECT; 1.
PROSITE; PS50041; C_TYPE_LECTIN_2; 1.
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01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-FDB-2005 (TrEMBLrel. 29, Last annotation update)
01-FDB-2005 (TrEMBLrel. 29, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                    "2F1 antigen, the mouse homolog of the rat 'me associated antigen,' is a lectin-like type II expressed by natural killer cells."; Eur. J. Immunol. 28:4409-4417(1998). Eur. J. Immunol. 28:4409-4417(1998). EMBL; AF097358; AAD03719.1; -; mRNA.
                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=99057052; PubMed=9842918;
DOI=10.1002/(SICI)1521-4141(199811)28:11<3755::AID-IMMU3755>3.0.CO;2-3;
Butcher S., Arney K.L., Cook G.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
Eukaryota; Metazoa;
Mammalia; Eutheria;
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MEDLINE=99077194; PubMed=9862378;
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5; Mismatches 21;
                                                                                              Score 568.5; DB 2
Pred. No. 4.4e-47;
5; Mismatches 54
                                                                                                                                                                                                  FA9023F1523656A8 CRC64;
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MEDLINE-98438735; PubMed=9765598; DOI=10.1016/S0167-4781(98)00107-9;
Lamers M.B., Lamont A.G., Williams D.H.;
"Human MAFA has alternatively spliced variants.";
Biochim. Biophys. Acta 1399:209-212(1998).
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01-UUN-1998 (TrEMBLrel. 06, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation updat
Mast cell function-associated antigen.
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TISSUB-Enzyme digested lung;
TISSUB-Enzyme digested lung;
Millia
Lamers M.B.A.C., Lamont A.G., Willia
Submitted (NOV-1997) to the EMBL/Gen
Submitted (NOV-1997) to the EMBL/Gen
EMBL; AF034952; AAC34731.1; -; mRNA.
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SMART; SM00034; CLECT; 1.
PROSITE; PS50041; C. TYPE LECTIN 2; 1.
SEQUENCE 189 AA; 21079 MW; T5E042AD40B2B4F6 CRC64;
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Mammalia; Eutheria;
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GO:0016021; C:integral to membrane; TAS.
GO:0004872; F:receptor activity; TAS.
GO:0005529; F:sugar binding; TAS.
GO:0007166; P:cell surface receptor linked signal transdu.
GO:00006968; P:cellular defense response; TAS.
GO:0006954; P:inflammatory response; TAS.
GO:0006954; P:inflammatory response; TAS.
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                                                                                                                                                                                                                                                                                                                                                  μ
                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OMICKKY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HWVCKKV
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                                                                                                                               LFGEYLGQDFYWIGLRNIDGWRWEGGPALSL-RILTNSLIQRCGAIHRNGLQASSCEVAL
                                                                                                                                                                                                                          CCGSXDSTCSHCPSCPILWTRNGSHCYYFSMEKXDWNSSLKFCADKGSHLLTFPDNQGVK 120
                                                                                                                                                                                                                                                                                                                                MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL
  HGVCKKV 187
                                            QWICKKV 186
                                                                                                                                                                                                CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
                                                                                                                                                                                                                                                                                              MIDSVIYSMLELPTATQAQNDYGPQQXSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
                                                                                                LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                                                                                                                                                                                                                 53.3%;
ilarity 55.6%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                    26;
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EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 548.5;
Pred. No. 3.9
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                                                                                                                                                                                                                                                                                                                                                                                                    mismatches 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2;
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RESULT

PRELIMINARY;

PRT;

188

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Q6ZYP3_CHICK
ID Q6ZYP3_CHICK PRELIMINARY;
AC Q6ZYP3;
C95_JUL_2004 (TrEMBLrel. 27,
DT 05_JUL_2004 (TrEMBLrel. 27,
DE B-lec protein.
GN (Chicken).

QS Gallus (Chicken).
QC Eukaryota; Metazoa; Chordat.
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC Archosauria; Aves; Neognath
QC TISSUB=Bursa;
RA Rogers S.L.;
RA Rogers S.L.;
RA Rogers S.L.;
RA NUCLEOTIDE SEQUENCE.
RC TISSUB=Bursa;
RA Rogers S.L.;
RA Rogers S.L.;
RA Rogers S.L.;
RA ROGERS S.L.;
RA NUCLEOTIDE SEQUENCE.
RC TISSUB=Bursa;
RA ROGERS S.L.;
RA NUCLEOTIDE SEQUENCE.
RC TISSUB=Bursa;
RA ROGERS S.L.;
RA ROGERS 
RESULT 6
Q6ZYP6_CHICK
ID Q6ZYP6_CHICK E
AC Q6ZYP6;
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Best Local S
Matches 45
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Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00615; C_TYPE_LECTIN_1;
PROSITE; PS50041; C_TYPE_LECTIN_2;
SEQUENCE 188 AA; 21053 MW; 6AD5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00059; Lectin_C; 1.
PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases. EMBL; AJ634337; CAG25421.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSSP, Q9H8F0; 1K9J.
GO; GO:0005529; F:sugar binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Characterisation of C-type lect
reveals that the NK Complex and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR002353; Antifreez
InterPro; IPR001304; Lectin C.
InterPro; IPR001304; Lectin C.
                                                                                                                                                                                     182
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                                                                                                                                                                                                                                                                                                                            HPQPCAQCPFDWIGFRGKCYYFSEDESNWTSSQNNCSALGASLAVFDSAEDLSFTMRHKG
                                                                                                                                                                                                                                                                                                                                                                        H---CPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLG
                                                                                                                                                                                                                                                                                                                                                                                                                        ELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKDSTCS
                                                                                                                                                                                          ICK
                                                                                                                                                                                                                                                                              QDFYWIGLRNIDG---
                                                                                                                                                                                                                                     SSPHWVGLSR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174:3475-3483 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Department of Pathology ol, United Kingdom.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of C-type lectin-like receptors in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.8%;
24.5%;
                                                                                                                                                                                                                                     EGKEHPWEWVNRSPLSHLFQVQGDGL
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27,
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                                                                                                                                                                                                                                                                                   WRWEGGPALS--LRILTNSLIQRCGAIHRNGLQASSCEVALQW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29;
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Last annotation update)
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and the MHC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1.46
9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 162.5; DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GADSAC3C9BE8F440 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No. 1.4e-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UNKNOWN_1.
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share a common
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                                                                                                                                                                                                                                          CAYLGDAGLSSSHCSTRRNW
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RESULT 7
CLC5A HUMAN
ID CCLC5A HUMAN
S:
AC Q9NY25; Q9UKQ0;
DT 10-MAY-2005 (Rel
DT 10-MAY-2005 (Rel
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Best Local S
Matches 45
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Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00059; Lectin C; 1.
PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (MAR-2004) to the EMBL/GenBank/DDBJ
EMBL; AJ634334; CAG25418.1; -; mRNA.
HSSP; O9H8FO; IK9J.
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR002353; AntifreezeII.
InterPro; IPR001304; Lectin C.
Dfam. DP001504 : Lectin C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00615; C_TYPE_LECTIN_1; PROSITE; PS50041; C_TYPE_LECTIN_2; SEQUENCE 188 AA; 20997 MW; 9FD5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Bone marrow;
Kaufman J.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bristol, Bristol,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Thesis (2002),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Characterisation of C-type reveals that the NK Complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kaufman J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9031;
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                                                                                                                                                                                                                                                                                                  SSPHWVGLSR-EGKEHAWEWVNRSPLSHLFQVQGDGL---
                                                                                                                                                                                                                                                                                                                                         QDFYWIGLRNIDG----
                                                                                                                                                                                                                                                                                                                                                                                                                                 H----CPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLG
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                                                                                                                                                                                                                                                                                                                                                                                     HPQPCAQCPFDWIGFRGKCYYFSEDESNWTSSQNNCSALGASLAVFDSAEDLSFTMRHKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EVREYPHVLG-TEWSRREGPSRGACVTFQLTMAAVFTVLLITAVAF-----AVQAFQP
    (Rel. 47,
(Rel. 47,
(Rel. 48,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             marrow;
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                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   United
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.8%;
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Created)
Last sequence update)
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                                                                                                                                                                                                                                                                                                                                         WRWEGGPALS -- LRILTNSLIQRCGAIHRNGLQASSCEVALQW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 162.5; D
Pred. No. 1.4e-
29; Mismatches
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; Galliformes;
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mes; Phasianidae; Phasianinae;
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RX MEDLINE=22737999; PubMed=12853948; DOI=10.1038/nature01782;
RA Hillier L.W., Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H.,
RA Hillier L.W., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E.,
RA Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E.,
RA Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E.,
RA Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A.,
RA Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A.,
RA Catrony C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Tin-Wollam A.-M., Abbott A., Minx P., Maupin R., Strowmatt C.,
RA Latreille P., Miller N., Johnson D., Murray J., Woessner J.P.,
RA Latreille P., Miller N., Johnson D., Murray J., Woessner J.P.,
RA Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Mardis E.R.,
RA Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Mardis E.R.,
RA Hickenbotham M.T., Clissoe S.L., Marra M.A., Raymond C., Haugen E.,
RA Gillett W., Zhou Y., James R., Phelps K., Iadanoto S., Bubb K.,
RA Simms E., Levy R., Clendenning J., Kaul R., Kent W.J., Purey T.S.,
RA Siddy S.R., McPherson J.D., Olson M.V., Eichler E.E., Green E.D.,
RA Baertsch R.A., Brent M.R., Keibler E., Filcek P., Boxk P., Suyama M.,
Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R.,
RA Materston R.H., Wilson R.K.;
RT Nature 424:157-164(2003)
                                                                                                                                                                                                 This
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"Expression of MDL-1
Submitted (JAN-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 2), FUNCTION, TISSUE SPECIFICITY, INTERACTION WITH TYROBP, AND MITHGENESIS OF LYS-16.
MEDLINE=99380598; PubMed=1044973; DOI=10.1073/pnas.96.17.9792;
Bakker A.B.H., Baker E., Sutherland G.R., Phillips J.H., Lanier L.L.,
"Myeloid DAP12-associating lectin (MDL)-1 is a cell surface receptor involved in the activation of myeloid cells.";
Proc. Natl. Acad. Sci. U.S.A. 96:9792-9796(1999).
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Name=CLEC5A; Synonyms=CLECSF5, MDL1;
Homo sapiens (Human).
                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 1).
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                                                                                                                                                                                                                                     IsoId=Q9NY25-2; Sequence=VSP 012839; TISSUE SPECIFICITY: Expressed in peripheral blood monocytes and the monocyte/macrophage cell lines U937 and MonoMac6, but not ir cell lines of other origins. Expression is down-regulated when monocytes differentiate into dendritic cells. SIMILARITY: Contains 1 C-type lectin domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUNCTION: May be involved in proinflammatory cells via TYROBP-mediated signaling in a calc SUBUNIT: Interacts with TYROBP.
                                                                                                                                                      European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELLULAR LOCATION: Type II ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                           Event-Alternative
                                                                                                                                                                                                 Swiss-Prot
                  AF139768; AAF02491.1; -; mRNA.
AJ271684; CAB71334.1; -; mRNA.
AC073647; AAS07444.1; -; Genom
                                                                                                                                                                                                                                                                                                                                                                                                IsoId=Q9NY25-1;
                                                                                                                             long as its content is in no way modified
                                                                                                                                                   rot entry is copyright. It is produced through Swiss Institute of Bioinformatics and the EN Bioinformatics Institute. There are no restr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Feller A.C.;
in human blood and cell lines.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                       splicing; Named isoforms=2;
             ; mRNA.
; Genomic_DNA.
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Matches 45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PRO0356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
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TOPO_DOM
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GO; GO:0005488; F:binding; TAS.
GO; GO:0006968; P:cellular defense resp
GO; GO:0007165; P:signal transduction;
InterPro; IPR002353; AntifreezeII.
InterPro; IPR001304; Lectin_C.
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                                                                                                                                      Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; E
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13-SEP-2005 (TrEMBLrel. 31,
13-SEP-2005 (TrEMBLrel. 31,
C-type lectin, superfamily m
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Q52M11;
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    TISSUE=Lung and heart;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
                                                            NUCLEOTIDE SEQUENCE
                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                       HUMAN
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45; Conserv
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188 AA;
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21521
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By similarity.
By similarity:
By similarity:
Missing (in isoform 2).
Missing (1899.
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N-linked (GlcNA
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Extracellular (Potential).
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RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Bileton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carrinci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carrinci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Wczup K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley C.C., Hale S., Garcia A.M., Rodrigues S., Sanchez A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Wilialon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Wilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skaiska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
Tand mouse cDNA sequences.";
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STRAIN=C57BL/60; TISSUB=Testis;
MEDLINE=99279253; PubMed=10349636; DOI=10.
Carninoi P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.
Meth. Enzymol. 303:19-44(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                 08'C634;
01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
10-MAY-2003 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Mus musculus adult male testis cDNA, RIKEN full-length enriched
Mus musculus adult male testis cDNA, RIKEN full-length enriched
library, clone:4922502D21 product:hypothetical C-type lectin-domain
library, clone:4922502D21 product:hypothetical C-type lectin-relate
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Submitted (APR-2005) to the EMBL/GenBank/DDBJ
EMBL; BC093714; AAH93714.1; -; mRNA.
                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Euarchontoglires; G
Muroidea; Muridae; Murinae; Mus.
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Name=4922502D21Rik;
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                                                                                                     DOI=10.1016/S0076-6879(99)03004-9;
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RX MEDLING-223-4683; NUMbed=1266; NOI=10.1038/nature01266; RRA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S., RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H., RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H., RA Nikaido I., Osato N., Saito R., Nogami A., Schonbach C., Gojobori T., RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W., RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S., RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S., RA Gaisterland T., Gariboldi M., Gissi C., Godzik A., Gough J., RA Gaisterland T., Kawasawa Y., Kedzierski R.M., King B.L., RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L., RA Kanai A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A., RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A., RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H., RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G., Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S., RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S., RA Ravasi T., Reed J.C., Reed D.J., Reid J., Rhingback K., Shimada K., Varardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C., RA Vuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N., RA Shiraki T., Wahi K., Kawai J., Alzawa K., Arakawa T., Fukuda S., RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A., RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A., RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A., RA Miyazaki A., Yoshino M., Waterston R., Lander E.S., Rogers J., RA Shinajawa E., Materston R., Lander E.S., Rogers J., RA Sandelina A., Washizaki Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Rachimann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Frunno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Gustincich S., Hill D., Hofmann M., Rodriguez I., Sakamoto N.,
RA Gustincich S., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Mayashiraki P., Storch K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashiraki Y., J., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
STRAIN=C57BL/6J; TISSUE=Testis; MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; PubMed=11076861; DOI=10.1101/gr.152600; PubMed=11076861; DOI=10.1101/gr.152600; PubMed=11076861; Pub
                                                                                                                                                                                                                                                                                                     STRAIN-C57BL/6J; TISSUE-Testis; MEDLINE-2049374; PubMed=11042159; DOI=10.1101/gr.145100; MEDLINE-2049374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., It Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; "Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new gegenome Res. 10:1617-1630(2000).
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Hayashizaki Y.;
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STRAIN=C57BL/6J; TISSUE=Testis;
STRAIN=C57BL/6J; PubMed=11217851; DOI=10.1038/35055500;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Analysis of the mouse transcriptome based on functional annotation 60,770 full-length cDNAs.";
Nature 420:563-573(2002).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of a
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J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Itoh M.,
                                                                                                                                                                                                                                                                                                                                                 genes.";
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RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Biat C.M., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Wackernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Rodrigues S., Sanchez A.,
RA Richards S., Worley D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Willing M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.B., Jones S.J.M., Marra M.A.;
RGeneration and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences ";
Proc. Matl And Schi U.S. A 90.16899-16803(2002).
                                                                                                                                                       Matches
                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                        PROSITE; PS50
Hypothetical
SEQUENCE 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P. Pukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W., Hayashida K., Hayatsu N., Hiramoto K., Hayashida K., Hayatsu N., Hiramoto K., Hayawa I., Kasukawa T., Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T., Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya Kurihara C., Matsuyama T., Miyazaki A., Murata M., Koyama T., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y., Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H., Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H., Sasawa A., Shinasta K., Shinagawa A., Shinata K., Shinagawa A., Takahashi F., Takaku-Akahira S., Takada Y., Tanaka T., Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                                                                                                                                                                                                                           Director MGC Project;
Submitted (FEB-2005) to the EMBL/Gen
EMBL; AK076635; BAC36425.1; -; mENA.
EMBL; BC089479; AAH89479.1; -; mENA.
Ensembl; ENSMUSG0000047720; Mus mus
                                                                                                                                                                                                                                                                                                   Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                               MGI; MGI:2685920; 4922502D21Rik.
                                                                                                                                                                                                                                                                                                                                                    nterPro;
                                                                                                                                                                                                                                                                                                                                              GO:0005529; F:sugar binding; IEA erPro; IPR001304; Lectin_C.
                        99
                                                                                                          13
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                                                                                                                                                     1 Similarity
48; Conser
DSTC-SHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK-LFG
                                                                                                                                                                                                                                                                                       PS50041; C
                                                                                                            PEAPQVQDESRWKLKAVLHRPHLSRFAMVAL----GLLTVILMSLLMYQR--ILCCGSK
                                                                   PRLPOTSHERRH-----HRLMFDAKKVLTLWTLLGGAVAVLLWGFFSFPRKFTVTRTAR
                                                                                                                                                                                                                                        al protein;
189 AA; 22
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                                                                                                                                                                                                                                                                                   TYPE_LECTIN_2;
                                                                                                                                                                                                                                             22107
                                                                                                                                                                           13.2%;
25.3%;
                                                                                                                                                                                                                                          ; Lectin.
22107 MW;
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                                                                                                                                                                           Score 135.5;
Pred. No. 6.
                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
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                                                                                                                                                     Mismatches
                                                                                                                                                                             No. 6.1e-05
                                                                                                                                                                                               DB 2;
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ıka T.,
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Best Local
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HSSP; Q07108; 1FM5.
GO; GO:0004872; F:receptor activity; II
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR001104; Lectin C.
Pfam; PF00059; Lectin C; 1.
SMART; SM00034; CLECT; 1.
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061969_/
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Q61969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=92388663; PubMed=1517565;
Glorda R., Weisberg E.P., IP T.K., Truc
"Genomic etructure and strain-specific
killer cell receptor NKR-P1.";
J. Immunol. 149:1957-1963(1992)...
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Mammalia; Eutheria; Eu
Muridae; Murinae; Mus
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                                  OGOSU3 CAEBR PRELIMINARY; PRT; 189 AA. Q6OSU3; Q6OSU3; 25-OCT-2004 (TrEMBLrel. 28, Created) 25-OCT-2004 (TrEMBLrel. 28, Last sequence update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) 4; Prochetical protein CBG20753 (Fragment).
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  Caenorhabditis briggsae
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PS50041; C_TYPE_LECTIN_2;
                                                                                                                                                                                                                                                                                                                                                     SVNLECPODWLSHRDKCFRVFQVSNTWEEGQADCGRKGATLLLIQDQEELRFLLDSIKEK 139
                                                                                                                                                                                                                                                                                                                                                                                                 SHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLGQD 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RWKLKAVLHRPHLSRFAMVALGLLTVILMSLLM-----YQRILCCGSKDST----C
                                                                                                                                                                                                                                                                  YNSFWIGLRFTLPDMNWKWINGTTF----NSDVLKITGVTENG----
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189 /
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larity 23.4%;
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21310 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 109.5; DB
Pred. No. 0.021;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D605E4BD967073B0 CRC64;
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RX MEDLINE-2019606; Pubmed=10731132; DOI=10.1126/science.287.5461.2185; RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., RA Adams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F., RA Adams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F., RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., RA Amanatides P.G., Scherer S.E., Richards S., Ashburner M., Henderson S.N., RA Goorge R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang O., Chen L.X., RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeliffer B.D., RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Nelson C.R., Miklos G.L.G., RA Baril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M., RA Beson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., RA Burtis K.C., Busam D.A., Butler H., Cadleu E., Center A., Chandra I., Bayris B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M., A Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
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Rhabditidae; Peloderinae; Caenorhabditis.
NCBI_TaxID=6238;
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SMART; SM00034; CLECT; 1.
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Neoptera; Endopterygota; Diptera; Brachycera; Musco
Ephydroidea; Drosophilidae; Drosophila.
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A Posler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K., and Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M., Al Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M., Al Harris N.L., Harvey D.A., Heiman T.J., Hernandez J.R., Houck J., Al Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C., Al Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z., Al Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D., Lin X., Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D., Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., Mentulov G., Milshina N.V., Mobarry C., Morris J., Nelson D.L., An Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M., Al Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M., An Nelson D.R., Nelson D.L., Marzzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Pale B.C., Siden-Klamos I., Singson M., Skupski M.P., Smith T., Sa Spier E., Spradling A.C., Stapleton M., Skupski M.P., Smith T., Sa Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., Wang S.-Y., Massarman D.A., Weinstock G.M., Weissenbach J., Yeh R.-F., Zhong F.N., Zhong W., Zhong W., Zhong S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu X., Smith H.O. This genome sequence of Drosophila melanogaster.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=22426065; PubMed=12537568;
Celniker S.E., Wheeler D.A., Krommiller B., Carlson J.W., Halpern Celniker S.E., Wheeler D.A., Krommiller B., Frise E., Hodgson A., Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A., George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R., Pacelb J.M., Park S., Ffeiffer B.D., Richards S., Sodergren E.J., Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Ventes Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Ventes Weinstock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G.M.; "Finishing a whole-genome shotgun: release 3 of the Drosophila melanogaster euchromatic genome sequence.";
Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Science [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=22426069; PubMed=12537572;
Milsra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E.,
Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.
Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A.,
Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
Harris N.L., Ramada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (3)
NUCLEOTIDE SEQUENCE.
MEDLINE=22426070; PubMed=12537573;
Kaminker J.S., Bergman C.M., Kronmiller
Kaminker J.S., Wheeler D.A., Lewis
                                                                                                                                                                                                                                                                                                                                                                                                                                               systematic review
NUCLEOTIDE SEQUENCE
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Submitted (MAR-2000) to t
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nce 287:2185-2195(2000).
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                                                                                                                                                                                                                                                                R., Stapleton M.,
                                                                                                                                                                                                                                                JE SEQUENCE.

Drosophila Genome Project;
S., Carlson J., Wan K., Pfeiffer S., Carlson J., Pacleb J., Park
                                                          (MAR-2005)
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SEQUENCE
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SMART; SM00034; CLECT; 1.
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01-MAR-2004 (TrEMBLrel. 26,
Hypothetical protein Y48E1B.
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MEDLINE=99069613; PubMed=9851916;
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ORFNames=Y48E1B.
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Science 282:2012-2018(1998).
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PS00615; C_TYPE_LECTIN_1; UNKNOWN_1.

PS50041; C_TYPE_LECTIN_2; 1.

188 AA; 21848 MW; 51E6C220B2CD39
                                                               PS50041; C TYPE LECTIN proteome; Hypothetical
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                                                                                      TYPE_LECTIN_2; 1.
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%1; Mismatches
  Score 78.5;
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01-DEC-2001
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Characterization of the human beta -glucan alternatively spliced isoforms.";
J. Biol. Chem. 276:43818-43823 (2001).
EMBL, AF400597; AALL1713.1; -; mRNA.
HSSP; 054709; 1108.
SnBembl: FNCOCOCO.
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                                                                                                                                                                                                                                                                                                                                          GO; GO:0016021; C:integral to membrane; TAS.
GO; GO:0042287; F:MHC protein binding; NAS.
GO; GO:0008329; F:pattern recognition receptor activity; IDA.
GO; GO:0008529; F:sugar binding; IDA.
GO; GO:0005529; F:sugar binding; IDA.
GO; GO:0019733; P:antifungal humoral response (sensu Verte...
GO; GO:0019734; P:antifungal humoral response (sensu Vertebrata);
GO; GO:0019756; P:carbohydrate mediated signaling; TAS.
GO; GO:0008037; P:cell recognition; IDA.
GO; GO:0042832; P:defense response to pathogenic protozoa; NAS.
GO; GO:0046803; P:reduction of virulence; NAS.
GO; GO:0042110; P:T-cell activation; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-Peripheral blood leukocyte; MEDLINE-21570237; PubMed=11567029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta-glucan receptor isoform
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3; Mismatches
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      RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D.A., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D.A., Heiman T.J., Wei M.-H., Ibeywam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Mosherson D.L.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Mosherid A.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Reinert E., Spradling A.C., Stepleton M., Strong R., Sun E.,
RA Kimme B.C., Nelson K.A., Nixon K., Duri V., Schen H.,
RA Mang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Kimse B., Spier E., Spradling A.C., Stepleton M., Strong R., Sun E.,
RA Khen S.M., Woodaye T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Khen S.M., Woodaye T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Khen S.M., Woodaye T., Wolley K.C., Wu D., Shan M., Zhou S., Zhou Q., Zheng L.,
RA 
                                                                                                                                                                                                                     Celniker S.E., Wheeler D.A., Kronmiller B., Carlson J.W., Ha Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson George R.A., Hoskins R.A., Laverty T., Muzny D.M., Nelson C. Pacleb J.M., Park S., Pfeiffer B.D., Richards S., Sodergren Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Weinstock G., Scherer S.E., Myers E.W., Gibbs R.A., Rubin G. "Finishing a whole-genome shotgun: release 3 of the Drosophi melanogaster euchromatic genome sequence.";
Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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01-MAY-2000 (TrEMBLrel.
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CG12111-PA (AT17652p).
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Amanatides P.G., Scherer S.E., I
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                                            a genomics
                                                                                                           Kaminker J.S., Bergman C.M., Kron
Patel S., Frise E., Wheeler D.A.,
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                                                                                         Ashburner M., Celniker S.E.;
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                                                            "The transposable elements of the
                                                                                                                                                        MEDLINE=22426070; PubMed=12537573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287:2185-2195(2000).
                                            perspective."
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                             3:RESEARCH0084.1-RESEARCH0084.20(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=10731132; DOI=10.1126/science.287.5461.2185;
ker S.B., Holt R.A., Evans C.A., Gocayne J.D.,
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Henderson S.N.,
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Best Local Similarity
Matches 25; Conserv
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SMART; SM00034; CLECT; 1.

PROSITE; PS50041; C TYPE LECTIN 2; 1.

PROSITE: PS50041; C TYPE LECTIN 2; 1.

SEQUENCE 188 AA; 21771 MW; 869868CAED1B513A CRC64;
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EMBL; A2070795; AAL48417.1; -; mRNA.
HSSP; P35247; 1B08.
Ensembl; CG12111; Drosophila melanogaster.
FlyBase; FBgn0030050; CG12111.
GO; GO:0005529; F:sugar binding; IEA.
InterPro; IPR001304; Lectin C.
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MEDILINE=22426069; PubMed=12537572;

Mistra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,

Mistra S., Crosby M.A., Mungall C.J., Millburn G.H., Prochnik S.E.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,

Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,

Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,

Lewis S.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Dresnek D., Rarfan D., Frise E., George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G., Miranda A., Mungall C.J., Nunoo J., Pacleb J., Paragas V., Park S., Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
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Berkeley Drosophila Genome Project;
Celniker S., Carlson J., Wan K., Pfeiffer
Hoskins R., Stapleton M., Pacleb J., Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Celniker S.; Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
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Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22(2002).
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                             2006, 15:35:27
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Pred. No. 82;
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Svirskas R.,
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Scoring table:

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572060 seqs,

Sequence: Title: Perfect score:

US-09-811-367B-3 1029

Minimum DB Maximum DB

seq length: 188 seq length: 189

Sequence 497, App Sequence 16146, A Sequence 10489, A Sequence 28935, A Sequence 38256, A Sequence 53473, A Sequence 8, Appli Sequence 8, Appli Sequence 19379, A Patent No. 5518916 Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App Sequence 592, App

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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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| COMB.pep:*
| Cgn2_6/ptodata/1/iaa/5_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/H_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/H_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
| Cgn2_6/ptodata/1/iaa/BCOMB.pep:*
| Cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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PCT-US95-042B-5

US-09-543-681A-7232

US-09-902-540-12348

US-08-469-427A-15

US-09-248-796A-19356

US-09-438-185A-957

US-09-438-185A-339

US-09-438-185A-339

US-09-314-051-2

US-09-314-051-2

US-09-314-051-2

US-09-124-198-5

US-08-464-023A-5

US-09-438-185A-761

US-09-438-185A-761

US-09-122-443-14

US-09-122-443-14

US-09-558-089-14

US-09-248-796A-20257

US-09-248-796A-20257

US-09-258-91A-30309

US-09-558-918-1580
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Sequence 5, Appli
Sequence 7232, Ap
Sequence 12348, A
Sequence 15, Appl
Sequence 19356, Ap
Sequence 957, App
Sequence 339, App
Sequence 2, Appli
Sequence 2, Appli
Sequence 5, Appli
Sequence 162, Appli
Sequence 162, Appli
Sequence 9925, A
Sequence 549, App
Sequence 14, Appl
Sequence 14, Appl
Sequence 14, Appl
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US-08-722-126A-5
                                                       MOLECULE TYPE: US-08-722-126A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/08722126A
Patent No. 6034227
GENERAL INFORMATION:
     Query Match
Best Local Similarity
                                                                                                                                                                                                           APPLICATION UMBER: US/08/722,126A
APPLICATION UMBER: US/08/722,126A
APPLICATION DATA:
CLASSIFICATION DATA:
APPLICATION UMBER: PCT/US95/04258
PRIOR APPLICATION DATA:
APPLICATION UMBER: PCT/US95/04258
FILING DATE: 06-APR-1995
PRIOR APPLICATION UMBER: IL 109257
APPLICATION UMBER: IL 109257
APPLICATION UMBER: 150-257
ATTORNEY/AGENT INFORMATION:
NAME: BROWDY, ROGET L.
REGISTRATION NUMBER: 25,618
REFERENCE/DOCKET NUMBER: PECHT=1A
TELLECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: PECHT, ISRAEL
APPLICANT: GUTHMANN, Marcelo D.
APPLICANT: GUTHMANN, Marcelo D.
APPLICANT: TAL, Michael
TITLE OF INVENTION: A DNA MOLECULE ENCODING A MAST CELL
TITLE OF INVENTION: FUNCTION-ASSOCIATED ANTIGEN (MAFA)
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
                                                                                                                                          TELEPHONE: (202) 628-5197
TELEPAX: (202) 737-3528
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: BROWDY
STREET: 419 Sevent
CITY: Washington
STATE: D.C.
                                                                                        TYPE: amin
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US-09-949-016-10489
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US-09-270-767-38256
US-09-270-767-38256
US-09-270-767-45559
US-09-270-767-45559
US-09-500-569-8
US-09-971-823B-8
US-09-971-823B-8
US-09-685-2
5518916-2
US-09-685-166A-592
US-09-685-1236-592
US-09-657-279-592
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          Score 838; DB 2;
Pred. No. 4e-86;
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Result No.

Score

Match Query

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                                                                                                                     Matches 151;
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                                                                                                                                                                                                                                                     TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                            PILING DATE: 06-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: IL 109
FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                      TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                               TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                     NAME: BROWDY, Roger L.
REGISTRATION NUMBER: 25,
REFERENCE/DOCKET NUMBER:
                                                                                                                     Local Similarity 80.7 les 151; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 06-API
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                              CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
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                                                          MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
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419 Seventh Street, N.W.,
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                                                                                                                                                                                                protein
                                                                                                                    81.4%; Score 838;
80.7%; Pred. No. 4
htive 15; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A DNA MOLECULE ENCODING A MAST CELL FUNCTION-ASSOCIATED ANTIGEN (MAFA)
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                                                                                                                                                    DB 4; Length 188;
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Sequence 7232, Application US/09543681A
Patent No. 6605709
GENERAL INFORMATION:
APPLICANT: GARY BRETON
TITLE OF INVENTION: DIAGNOSTICS AND AMINO ACTIVITY OF INVENTION: NUCLEIC ACID AND AMINO ACTIVITY OF INVENTION: NUMBER: US/09/543,681A
CURRENT APPLICATION NUMBER: US/09/543,681A
CURRENT FILLING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 60/128,706
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344
SEQ ID NO 7232
LENGTH: 188
TYPE: PRT
ORGANISM: Proteus mirabilis
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APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Wiegand, Roger C.
TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof FILE REFERENCE: 38-10(15849)B
CURRENT APPLICATION NUMBER: US/09/902,540
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION.
                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/217,883
PRIOR FILING DATE: 2000-07-10
NUMBER OF SEQ ID NOS: 16825
SEQ ID NO 12348
LENGTH: 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12348, Application US/09902540 Patent No. 6833447 GENERAL INFORMATION:
                                                                                                                     Matches
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137 NIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ 180
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                                         40 LVWGR-----
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                                                                              77 ILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLGQDFYWIGLR 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23;
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                                       ---VRRDGWNATREVC----RLL----EG----GKFLPQ----LHLV 72
                                                                                                                                      5.0%;
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19.7%; Pred. No. 1.1e+03;
                                                                                                                   ; Score 51.5; DB 2; ; Pred. No. 1.2e+03; 20; Mismatches 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11; Mismatches
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                                                                                                                                                          Length 188;
                                                                                                                     Indels
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GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
APPLICANT: Keith Weinstock et al
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.132
CURRENT APPLICATION NUMBER: US/09/248,796A
CURRENT FILING DATE: 1999-02-12
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: US 60/096,409
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Best Local
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APPLICANT: Erikes
APPLICANT: Olofes
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Alitalo, Kari
APPLICANT: Pajusola, Katri
TITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B
TITLE OF INVENTION: DNA CODING THEREFOR
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/397,651
FILING DATE: 01-MAR-1995
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
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STATE: 20005
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REGISTRATION NUMBER: 26,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/469,427A FILING DATE: 06-JUN-1995 CLASSIFICATION: 435
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16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: protein
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Pred. No. 1.2e+03;
8; Mismatches 22;
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; LOCATION: (184),(18
; OTHER INFORMATION:
US-09-248-796A-19356
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RESULT 8
US-09-438-185A-339
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US-09-438-185A-957
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NUMBER OF SEQ ID NOS: 28208
SEQ ID NO 19356
LENGTH: 189
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 1074
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 957
LENGTH: 188
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Patent No. 682
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Best Local Similarity
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APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Kalman, Sue
APPLICANT: Davis, Romald
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Chlamydia Pneumoniae Genome Sequence
FILE REFERENCE: 018941-000411US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Stephens, Richard
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                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                              ORGANISM: Chlamydia pneumoniae
                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       102 KLTYSSFLONCRKTNVHTMAQINFCKNSAVELFGINETLG---YOVGFEYV-
                                                                                                    123 GEYLGODF 130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93 KKDWNSSLKFCADKGSHL---LTFPDNQGVKLFG--EYLGQDFYWIGLRNIDGWRWEGGP 147
                                                                    69 QSLLPQDY 76
                                                                                                                                      15 LGSRNRKRCSFF
                                                                                                                                                                        78 LWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLT----
                                                                                                                                                                                                          16;
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                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wayne
                                                                                                                                                                                                            4.7%; Score 48.5; DB 2; 23.5%; Pred. No. 2.6e+03; tive 11; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Mismatches
                                                                                                                                        FSSGTALGKGRGEHLFSIKKLNHKHKYVLYLDHQGIPTEKAY 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 49.5; Db 2;
Pred. No. 2e+03;
Predmatches 24;
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                                                                                                                                                                           -----FPDNQGV---KLF 122
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; Sequence 339, Application US/09438185A ; Patent No. 6822071

GENERAL INFORMATION:
APPLICANT: Stephens, Richard
APPLICANT: Mitchell, Wayne

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FILE REFERENCE: 018941-000411US
CURRENT APPLICATION NUMBER: US/09/438,185A
CURRENT FILING DATE: 2002-03-13
PRIOR APPLICATION NUMBER: US 60/108,279
PRIOR FILING DATE: 1998-11-12
PRIOR PRIOR FILING DATE: 1998-11-12
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NOS: 1074
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 339
LENGTH: 189
TYPE: PRT
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; MOLECULE TYPE:
US-08-905-267-2
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Patent No. 5959075
GENERAL INFORMATION:
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Best Local
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                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-442-6672
TELEFAX: 206-442-6678
TELEFAX: 206-42-6678
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: CPn0337
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Chlamydia pneumoniae
                                   SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Sawialak, Deborah A.
REGISTRATION NUMBER: 37,438
REFERENCE/DOCKET NUMBER: 96-
                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Adams, Robyn L.
APPLICANT: Jelmberg, Anna C.
APPLICANT: Lofton-Day, Catherine E.
APPLICANT: Jaspers, Stephen R.
TITLE OF INVENTION: TESTIS-SPECIFIC INSULIN HOMOLOG POLYPEPTIDES
NUMBER OF SEQUENCES: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: W
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 536
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les 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  112 EERRKRKLLLHRYELRKLEGKIAQKGMTLIPLGMFLSRGYVKVRLGCCRGK 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 ESRWKLKAVLHRPHLSRF-AMVALGLLTVILMSLLMYQ-----RILCCGSK 65
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Davis, Ronald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: ZymoGenetics, Inc.
1201 Eastlake Avenue East
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
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Conklin, Darrell C.
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RESULT 11
US-09-617-389B-2
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Best Local Similarity 30.8
Matches 20; Conservative
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Best Local S
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                                                                                                                                                                                                Matches
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Sawislak, Deborah A.
REGISTRATION NUMBER: 37,438
REFERENCE/DOCKET NUMBER: 96.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/314,051
                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Jelmberg, Anna C.
APPLICANT: Lofton-Day, Catherine E.
APPLICANT: Jaspers, Stephen R.
APPLICANT: Jaspers, Stephen R.
TITLE OF INVENTION: TESTIS-SPECIFIC INSULIN HOMOLOG POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: ZymoGenetics, Inc.
STREET: 1201 Eastlake Avenue East
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 KLFGE 124
                                                                                                120 KLFGE 124
                                                                43 KLCGQ 47
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                                                                                                                                                                60 LCCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGV 119
                                                                                                                                4 LCC----
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                                                                                                                                                                                                                 Similarity
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   amino acid

XGY: linear
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nilarity 30.8%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                206-442-6672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robyn L.
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                                                                                                                                  SC-LLWL--GLILAPFSQEQEEVTSPTKLC---GRDLLV----EVI 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -SC-LLWL--GLILAPFSQEQEEVTSPTKLC---GRDLLV----EVI 42
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Pred. No. 4.4e+03;
7; Mismatches 17; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                96-06
                                                                                                                                                                                               Score 46.5; DB 2;
Pred. No. 4.4e+03;
7; Mismatches 17;
                                                                                                                                                                                                                                 Length 188;
                                                                                                                                                                                                Indels
                                                                                                                                                                                                21;
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US-07-749-001-5
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Matches 2
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Sequence 5, App. -
No. 5264557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 24
SOFTWARE: FRANCSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 188
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Patent No. 6709659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Rattus norvegicus
-09-617-389B-2
                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/749,001
FILING DATE: 19910823
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 08/905,267
PRIOR FILING DATE: 1997-01-18
PRIOR PPLICATION NUMBER: 60/023,213
PRIOR FILING DATE: 1996-02-08
PRIOR APPLICATION NUMBER: 60/031,592
PRIOR FILING DATE: 1996-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/617,389B
CURRENT FILING DATE: 2000-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lofton-Day, Catherine B.
TITLE OF INVENTION: Antibodies That Bind Testis-Specific
TITLE OF INVENTION: Insulin Homolog Polypeptides
FILE REFERENCE: 96-06C3
                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Salomon,
APPLICANT: Persico,
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 09/339,148 PRIOR FILING DATE: 1999-06-24
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APPLICANT: Conklin, Darrell C.
                           ATTORNEY/AGENT INFORMATION:
NAME: SCOLL, WALBON T.
REGISTRATION NUMBER: 26,581
REFERENCE/DOCKET NUMBER: WT:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                   CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                        STREET:
TELEPHONE: (202) 861-3000
TELEFAX: (202)822-0944
                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43 KLCGQ 47
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                                                                                                                                                                                                                                                                                               20036
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                                                                                                                                                                                                                                                                                                                   USA
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30.8%;
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Maria G.
A HUMAN CRIPTO-RELATED GENE
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                                                    WTS/5683/91630/SRL
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Pred. No. 4.4e+03;
7; Mismatches 17;
                                                                                                                                                                                                       Version
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US-08-154-198-5
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                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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LENGTH: 188 amino aci
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                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 17-NOV-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,001
FILING DATE: 23-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/154,198
FILING DATE: 17-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 15
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: SALOMON, APPLICANT: PERSICO,
                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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CITY: San Francisco
STATE: California
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                                                                                                           / Match 4.3%; Score 44.5; DB 1; Local Similarity 25.0%; Pred. No. 7.3e+03; tes 18; Conservative 10; Mismatches 29;
                                                                                                                                                                                                                                  TOPOLOGY:
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                                   47 RDDSIWPQEEPAIRPRSSQ------RVLPMGIQHSKELNRTCC-LNEGTCMLGSFCA 96
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   74 SCPILWTRNGSH 85
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                                                                           QDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRI--LCCGSKDSTC---SHCP 73
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Maria G.
A HUMAN CRIPTO-RELATED GENE
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RESULT 15
US-08-464-023A-5
; Sequence 5, Application US/08464023A
; Patent No. 5854399
; GENERAL INFORMATION:
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; LENGTH: 188 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-463-335-5
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US-08-463-335-5
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/463,335
FILING DATE: 05-JUN-1995
CLLASSIFICATION EATA:
APPLICATION NUMBER: US 07/749,001
FILING DATE: 23-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: SCOLT, WATSON T.
REGISTRATION NUMBER: 26,581
REFERENCE/DOCKET NUMBER: WTS/5683/91630/SRL
TELEPHONE: (202) 861-3000
TELEPHONE: (202) 862-3000
TELEPAX: 24665 CHEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.3%; Score 44.5; DB 1; Length 188; Best Local Similarity 25.0%; Pred. No. 7.3e+03; Matches 18; Conservative 10; Mismatches 29; Indels 1
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GENERAL INFORMATION:
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TELEX: 248453 CUSH
INFORMATION FOR SEQ ID NO: 5:
APPLICANT: Salomon, David S.
APPLICANT: PerBiCO, Maria G.
TITLE OF INVENTION: A Human Cripto-Related Gene
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSE: Towneerd and Townsend and Crew
STREET: One Market Plaza, Steuart Street Tower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS: ADDRESSEE: CUSHMAN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Salomon, David S.
APPLICANT: Persico, Maria G.
TITLE OF INVENTION: A HUMAN CRIPTO-RELATED GENE
NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Washington STATE: D.C.
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Search completed: January Job time : 26.2885 secs
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CONTURER: IEM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIAL Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,023A
FILING DATE: 05-JUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,001
FILING DATE: 23-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/154,198
FILING DATE: 17-NOV-1995
APPLICATION NUMBER: US 08/154,198
FILING DATE: 17-NOV-1995
APPLICATION INFORMATION:
NAME: PASETIAL VERVIEW
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NAME: PASETIA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
TYPE: amino acid
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TOPOLOGY: linear
MOLECULE TYPE: protein
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Bastian, Kevin L. REGISTRATION NUMBER: 34,774
                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 QDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRI--LCCGSKDSTC---SHCP
                                                                                                                                                                                                                                                                                            74 SCPILWTRNGSH
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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 188
Maximum DB seq length: 189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                        Database
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Gapop 10.0 , Gapext 0.5
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1029
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                               Published Applications AA_Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
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Copyright (c) 1993 - 2006 Compugen Ltd.
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RESULT 1 US-09-811-367B-3

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548.5 548.5 548.5 548.5 548.5 1143.5 1143.5 1143.5 619.5 69.5 69.5 69.5 55.5	Score
	Query Match 1
1888 1888 1889 1889 1889 1888 1888 1888	Length D
	DB II
US-09-811-3678-3 US-09-811-3678-5 US-10-207-655-196 US-10-207-655-196 US-10-125-540-487 US-09-754-1308-83 US-10-287-436A-69 US-10-287-436A-1251 US-10-287-436A-1251 US-11-097-143-5490 US-11-097-143-3261 US-10-424-599-250285 US-10-477-701-963-202199 US-10-472-928-1876 US-10-472-928-1876 US-10-472-928-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-472-938-1876 US-10-478-938-1876 US-10-488-264-4950 US-10-10-10-260A-3303 US-10-767-701-34822 US-10-767-701-34822	D
sequence 3, Appli sequence 5, Appli sequence 5210, Ap sequence 487, Appl sequence 487, Appl sequence 83, Appl sequence 83, Appl sequence 83, Appl sequence 1251, Ap sequence 1251, Ap sequence 3161, Ap sequence 3451, Ap sequence 250285, sequence 260240, sequence 260240, sequence 272199, sequence 260240, sequence 272199, sequence 272199, sequence 272199, sequence 272199, sequence 27219, sequence 27219, sequence 27219, sequence 27219, sequence 27219, sequence 27219, sequence 27219, sequence 37226, A sequence 37226, A sequence 4950, Ap sequence 4950, Ap sequence 3303, Ap sequence 3303, Ap sequence 34022, A	Description

; Sequence 5, Application US/09811367B; Patent No. US20020155110A1; GENERAL INFORMATION:

APPLICANT: GEMINI SCIENCE, INC.

RESULT 2 US-09-811-367B-5

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	4.7	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.9	4.9	5. O	5.0	5.0		π >
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ALIGNMENTS	US-10-425-115-308045	US-10-767-701-50982	US-10-501-282-1558	US-10-425-115-315785	US-10-425-115-242970	US-10-425-114-38940	US-10-424-599-270985	US-10-424-599-235426	US-10-424-599-152847	US-10-633-680-130	US-09-798-889-130	US-10-389-566-909	US-10-074-566-74	US-10-074-566-66	US-10-767-701-43351	US-10-767-701-37569	US-10-424-599-226112	COURT ACC CRAFE	176-10-450-763-32442
	Sequence 3			Sequence 3									sequence /			sequence o	2 action 5		Seguence 3
	308045,	50982, A	1558, Ap	315/85,	242970,	3894U, A	•	235426,	15704/	150, App	130, App	130 App	/4, ADDI	ss, Appr	000±, A	173E1 A	73500	36313	32442, A

US-09-811-367B-3 Sequence 3, Application US/09811367B Patent No. US20020155110A1 GENERAL INFORMATION: APPLICANT: GEMINI SCIENCE, INC. APPLICANT: Takahashi, No. US20020155110Aluaki APPLICANT: Mikayama, Toshifumi TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA) TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USING THE: TITLE REFRENCE: 021286/0278719 CURRENT APPLICATION NUMBER: US/09/811,367B CURRENT PILING DATE: 2002-03-12 PRIOR APPLICATION NUMBER: 60190,716 PRIOR PEDILCATION NUMBER: 60190,716 PRIOR FILING DATE: 2000-03-17 NUMBER OF SEQ ID NOS: 20 Query Match Best Local Simi Matches 188; SOFTWARE: PatentIn version 3.0 SEQ ID NO 3 LENGTH: 188 TYPE: PRT ORGANISM: Mus musculus 121 LFGEYLGODFYWIGLRNIDGWRWEGGPALSLRILTNSLIORCGAIHRNGLQASSCEVALO 121 LFGEYLGODFYWIGLRNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGLQASSCEVALQ 180 181 WICKKVLY 188 181 МІСККУТУ 188 61 CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120 61 h 100.0%; Score 1029; DB 3; Similarity 100.0%; Pred. No. 7.6e-98; 88; Conservative 0; Mismatches 0; CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120 Indels Length 188; 0 0

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Sequence 196, Application US/10207655

Publication No. US20030118592A1

GENERAL INFORMATION:
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Hayden-Ledbetter, Martha S.
ITITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
FILE REFERENCE: 390069.401C1

CURRENT APPLICATION NUMBER: US/10/207,655

CURRENT APPLICATION NUMBER: US/10/207,655

CURRENT FILING DATE: 2002-07-25

NUMBER OF SEQ ID NOS: 426

SOFTWARE: PatentIn version 3.0

SEQ ID NO 196
LENGTH: 189
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; TYPE: PAT
; ORGANISM: Rattus norvegicus
US-09-811-367B-5
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US-10-207-655-196
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APPLICANT: Mikayama, Toshifumi
TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USING
FILE REPERENCE: 021286/0278719
CURRENT ELIUNG DATE: 2002-03-12
PRIOR APPLICATION NUMBER: US/09/811,367B
CURRENT FILING DATE: 2002-03-17
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin version 3.0
SEQ ID NO 5.0
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Best Local Similarity
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                                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Homo sapiens
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                                                                                                    CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
                                                                                                                                   MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWIL
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                                                                                                                                                                                                                      55.2%; Score 568.5; DB 4; 57.2%; Pred. No. 2.7e-50;
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80.7%; Pred. No. 4e-78;
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APPLICANT: GMMINI SCIENCE, INC.

APPLICANT: Takahashi, No. US20020155110Aluaki

APPLICANT: Mikayama, Toshifumi

TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)

TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USIN

FILE REFERENCE: 021286/0278719

CURRENT APPLICATION NUMBER: US/09/811,367B

CURRENT FILING DATE: 2002-03-12

PRIOR APPLICATION NUMBER: 60/190,716

PRIOR FILING DATE: 2000-03-17

NUMBER OF SEQ ID NOS: 20

SOFTWARE: Patentin version 3.0

SEQ ID NO 1

LENGTH: 189

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                    US-09-811-367B-1
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US-10-756-149-5210
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US-10-756-149-5210
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APPLICANT: Ziotnik, Albert
APPLICANT: Ziotnik, Albert
TITLE OF INVENTION: MCTHODS OF DIAGNOSIS OF METASTATIC CANCER, COMPOSITIONS AND
TITLE OF INVENTION: METHODS OF SCREENING FOR MODULATORS OF METASTATIC CANCER
FILE REFERENCE: file
CURRENT APPLICATION NUMBER: US/10/756,149
CURRENT FILING DATE: 2004-01-12
NUMBER OF SEQ ID NOS: 5818
SOFTWARE: Patentin version 3.2
SEQ ID NO 5210
LENGTH: 189
TYPE: PRT
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                                                  Query Match
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     Matches
  Local Similarity nes 104; Conserv
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53.3%; Score 548.5; DB 3 ilarity 55.6%; Pred. No. 3.1e-48; Conservative 26; Mismatches 56
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                                                  Length 189;
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RESULT 6
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US-10-125-540-487
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
                                                                                                      Sequence 487, Application US/10125540
publication No. US20030059875A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ14C1
CURRENT APPLICATION NUMBER: US/10/125,540
CURRENT FILING DATE: 2002-04-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 487, Application US/09764870 Patent No. US20020042386A1
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 646
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 487
LENGTH: 189
TYPE: PRT
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/764,870
CURRENT FILING DATE: 2001-01-17
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                     KELEFMFKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTEC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 152; DB 3; Length 189; Pred. No. 2.7e-07;
                                                                                                                                                                  and Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80;
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; ORGANISM: Homo sapiens
US-10-125-540-487
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                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/759,130B
CURRENT FILING DATE: 2002-09-16
PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR FILING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR PILING DATE: 2000-05-24
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR PILING DATE: 2000-05-24
PRIOR APPLICATION NUMBER: US 09/333,159
PRIOR FILING DATE: 1999-06-14
PRIOR FILING DATE: 1999-06-14
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR APPLICATION NUMBER: US 09/608,452
PRIOR APPLICATION NUMBER: US 09/608,452
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 83, Appropriate Publication No.
                                                                    SOFTWARE: FastSEQ
SEQ ID NO 83
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APPLICANT:
APPLICANT:
                                                                                                                                   PRIOR APPLICATION NUMBER: US 09/602,871
PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: US 09/420,707
PRIOR FILING DATE: 1999-10-19
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TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: USES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                NUMBER OF SEQ ID NOS: 460
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                   LENGTH: 18
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                  APPLICATION NUMBER: US 09/393,996 FILING DATE: 1999-09-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             176 LMTRPWVCSKMAY 188
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                                           188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EVALOWICKKVLY 188
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Kirst, Susan J
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Fraser, Christopher C
Sharp, John D
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                                                                                          for Windows Version
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; LENGTH: 188
; TYPE: PRT
; ORGANISM: Homo 6
US-10-741-790-83
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US-10-741-790-83
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                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR FILING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR FILING DATE: 2000-04-27
PRIOR PRIOR PAPPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/333,159
PRIOR FILING DATE: 1999-06-14
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR FILING DATE: 1999-06-29
PRIOR FILING DATE: 1999-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 83, Applica Publication No. US20 GENERAL INFORMATION:
                                                                SOFTWARE: FastSEQ for Windows SEQ ID NO 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wrighton, Nicolas
APPLICANT: Goodearl, Andrew
APPLICANT: Holtzman, Douglas A
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
TITLE OF INVENTION: USES.
                                                                                                PRIOR APPLICATION NUMBER: US 09/602,871
PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: US 09/420,707
PRIOR FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Millennium Pharmaceuticals, APPLICANT: McCarthy, Sean A APPLICANT: Fraser, Christopher C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/741,790 CURRENT FILING DATE: 2003-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: MPI00-5350MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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                                                                                                                                                                                      FILING DATE: 2000-06-30
APPLICATION NUMBER: US 09/393,996
FILING DATE: 1999-09-10
                                                                                                                                                                                                                                          APPLICATION NUMBER: US 09/608,452
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ICKK 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EKYFIGLIYHREEKRWRWINNSVFNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFGEYLGQ 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIISGLIVVVLKVVGMTLELLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Barnes, Thomas
Kirst, Susan J
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10741790
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                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kevin R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Charles R
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24.5%; Pred. No. 2e-
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                                                                                                                      RESULT 11
US-10-287-436A-1251
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 69
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Best Local Similarity
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CURRENT FILING DATE: 2002-10-31
PRIOR APPLICATION NUMBER: US 60/336,220
PRIOR FILING DATE: 2001-10-31
 FILE REFERENCE: 10872.514696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                          182
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Sequence 1251, Application US/10287436A
publication No. US20050202421A1
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND
TITLE OF INVENTION: RHEUMATOID ARTHRITIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 69, Application US/10287436A
Publication No. US20050202421A1
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND 7
TITLE OF INVENTION: RHEUMATOID ARTHRITIS
FILE REFERENCE: 10872.514696
                                                                                                                                                                                                                                                                                                                                                                                         125 EKYFIGLIYHREEKRWRWINNSVPNGNVTNQNQNFNCATI---GLTKTFDAASCDISYRR 181
                                                                                                                                                                                                                                                                                                                                                                                                                                               129 DFYWIGL---RNIDGWRWEGGPALSLRILTNSLIQRCGAIHRNGL----QASSCEVALQW
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CURRENT APPLICATION NUMBER: US/10/287,436A CURRENT FILING DATE: 2002-10-31 PRIOR APPLICATION NUMBER: US 60/336,220 PRIOR PILING DATE: 2001-10-31

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; ORGANISM: Homo sapiens
US-10-287-436A-1251
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US-11-097-143-5490
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                                                                                                    ; ORGANISM: DROSOPHILA US-11-097-143-5490
                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/11/097,143
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: 60/160,191
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR FILING DATE: 1999-10-28
PRIOR FILING DATE: 1999-10-28
PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: 60/164,769
PRIOR APPLICATION NUMBER: 60/173,383
PRIOR APPLICATION NUMBER: 60/173,383
PRIOR FILING DATE: 1999-12-28
PRIOR FILING DATE: 1999-12-28
PRIOR FILING DATE: 1999-12-28
PRIOR FILING DATE: 1999-12-28
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1251
LENGTH: 188
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                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/191,637
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 43008
SOFTWARE: FASTSEQ for Windows Versio
SEQ ID NO 5490
LENGTH: 188
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Best Local Similarity
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Query Match 8.1%; Score 83; DB 6; Length 188; Best Local Similarity 19.7%; Pred. No. 3.6; Matches 36; Conservative 31; Mismatches 66; Indels
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APPLICANT: et al.
TITLE OF INVENTION: DETECTION KIT, SUCH AS
TITLE OF INVENTION: DROSOPHILA GENES.
                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/175,693
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: 60/184,831
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EXPRESSION OF 10,000 OR
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RESULT 14

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US-11-097-143-3261
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CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: 60/160,191
PRIOR FILING DATE: 1999-10-19
PRIOR FILING DATE: 1999-10-28
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR FILING DATE: 1999-10-28
PRIOR FILING DATE: 1999-10-28
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SOFTWARE: FRATSEQ for Windows
SEQ ID NO 3261
LENGTH: 188
TYPE: PRT
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Best Local Similarity
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APPLICANT: et al.
TITLE OF INVENTION: DETECTION KIT, SUCH AS
TITLE OF INVENTION: ARRAYS, FOR DETECTING
TITLE OF INVENTION: DROSOPHILA GENES.
FILE REFERENCE: CL000728
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PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: 60/175,693
PRIOR FILING DATE: 2000-01-12
PRIOR PILING DATE: 2000-02-24
PRIOR FILING DATE: 2000-02-24
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PRIOR FILING DATE: 1999-11-12
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                                                                              108 WISGNDLGTEGAFYWMSNGRPMTYAPWNGPKOMPDNYGGN---ENC--VHMFATREMIND 162
                                                                                                                       132 WI-----GLRNIDGWR------WEGGPALSLRILINSLIQRCGAIH----RNGLQA 172
163
                                         173 SSCEVALOWICK 184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49 ILMSLLMYQRILCCGSK------DSTCSHCPSC------PILWT----RNGSHCYYF
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                                                                                                                                                              48 FVRIGDNYYYIEPMNKVNWFQAAGACRMMNAHLASIEDKPEMEALIKYMKAKGFKNNDYF 107
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LILSVIISLQLLCLLDRTMATPPKGPGPVADCPNCVDESQYTPNKWTMPLLKLGEKRYYL 64
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  ANCKIOMLYVCE
                                                                                                                                                                                                                                                Conservative
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18.9%;
    174
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Pred. No. 43;
24; Mismatches
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EXPRESSION OF 10,000 OR MORE
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                                                                                                                                                                                                                                                       52;
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                                                                                                                                                                                                                                                                                              Length 188;
                                                                                                                                                                                                                                                       Gaps
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US-10-114-893-48
Sequence 48, Application US/10114893
Publication No. US20020193567A1
GENERAL INFORMATION:

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APPLICANT: Evans, Cheryl
APPLICANT: Evans, Cheryl
APPLICANT: Merberg, David
APPLICANT: Treacy, Maurice
APPLICANT: Spaulding, Vikki
APPLICANT: Spaulding, Vikki
APPLICANT: Spaulding, Vikki
APPLICANT: Spaulding, Vikki
APPLICANT: Garlin-Duckett, McKeough
APPLICANT: Genetics Institute, Inc.
APPLICANT: Genetics Institute, Inc.
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: GI 6000-10A
CURRENT APPLICATION UNUMBER: US/10/114,893
CURRENT APPLICATION NUMBER: US/10/114,893
CURRENT APPLICATION NUMBER: 09/413,232
EARLIER APPLICATION NUMBER: 09/413,232
EARLIER FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 321
SEC IT NOS: 321
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                                                                                                                                                                                                                                                                                                                                       APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Cao, Yinua
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants
FILE REPERENCE: 38-21(52322)B
FULE REPERENCE: 38-21(52322)B
CURRENT APPLICATION NUMBER: US/10/425,115
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 369326
SEQ ID NO 345243
LENGTH: 189
TYPER: NEW
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Matches
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Publication No. US20040214272A1
GENERAL INFORMATION:
                                                                                                             Query Match 6.0%; Score 61.5; DB 4; Length 189; Best Local Similarity 20.9%; Pred. No. 6e+02; Matches 24; Conservative 23; Mismatches 41; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 48
LENGTH: 189
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                    OTHER INFORMATION: Clone ID: MRT4577_78028C.1.pep
-10-425-115-345243
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APPLICANT: McCoy, John M.
APPLICANT: LaVallie, Edward R.
APPLICANT: Collins-Racie, Lisa
APPLICANT: Evans, Cheryl
                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Zea mays
FEATURE:
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nes 27; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 DSSIYSTLELPE----APQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQ 57
          PILLSIGRWISRA--SAPWYLGFCILALAPRLIVDLVAIFLFQKLCCSPMLISSNTCGVV 62
                                                             PQVQDESRWKLKAVLHRPHLSRPAMVALG-LLTVILMSLLMYQRILC------CGSK 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RILCCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLL 111
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Qy 66 DSTC-----SHCPSCPILWTRNGSHCYYFSME-KKDWNSSLKFCAD 105
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Search completed: January 9, 2006, 15:55:59
Job time: 73.5381 secs

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Scoring table: sequence:

BLOSUM62

Perfect score: Title:

US-09-811-367B-3 1029

protein -

protein search, using sw model

January 9, 2006, 15:36:43;

Post-processing: Minimum Match

Listing first 45 summaries

100%

Minimum DB Maximum DB

seq length: 188 seq length: 189

Total number of hits satisfying chosen parameters:

61141 seqs, 8493638 residues Gapop 10.0 , Gapext 0.5

88, Appl
322, App
2698, Ap
2698, Ap
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: /cgn2 6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

2: /cgn2-6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

3: /cgn2 6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/JSO7_NEW_PUB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*
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Copyright (c) 1993 - 2006 Compugen Ltd
US-10-055-877-205
US-10-055-877-206
US-10-055-877-207
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Sequence 206, App
Sequence 207, App
Sequence 209, App
Sequence 1, Appli
Sequence 32, Appli
Sequence 32, Appli
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1, 393, Ap
4, Appli
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6250, Appl
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117, Appl
2976, Ap
2976, Ap
3000, Ap
4044, Ap
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US-10-055-877-205
; Sequence 205, Application US/100; Sequence 205, Explication US/100; Publication No. US20050288241A1
; GENERAL INFORMATION: APPLICANT: DeCristofaro, Marc APPLICANT: Padigaru, Muralidha: APPLICANT: Miller, Charles APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLICANT: Tchernev, Velizar APPLIC
  APPLICANT: Casman, Stacie
APPLICANT: Boldog, Ference
TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR FILING DATE: 2001-01-23
PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR FILING DATE: 2001-01-24
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
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Patturajan, Meera
Burgess, Cahterine
Eisen, Andrew
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Spytek, Kimberly
Ratelli, Luca
Kekuda, Ramesh
Guo, Xiaojia
Zerhusen, Bryan
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Miller, Charles
Tchernev, Velizar
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Li, Li
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Taupier Jr., Raymond
Pena, Carol
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Baumgartner, Jason
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ballinger, Robert
Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Andrew,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anderson, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10055877
o. US20050288241A1
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US-10-884-730-324
US-10-884-730-325
US-10-793-626-2698
US-10-995-561-643
US-10-995-561-643
US-11-036-797-37
US-11-147-492-24
US-10-845-517-221
US-11-47-492-12
US-11-147-492-12
US-11-147-492-12
US-11-187-492-12
US-11-187-492-13
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Sequence
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Result

Score

Match

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DB

SUMMARIES

838 568.5 548.5

100.0 81.4 55.2 53.3

41.5 40.5 40.5 37.5 37.3 37.3 37.3 37.3

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RESULT 2
US-10-055-877-206
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NUMBER OF SEQ ID NOS: 512
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 205
LENGTH: 188
                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 206, Application US/10055877 Publication No. US20050288241A1
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Best Local
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APPLICANT:
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APPLICANT: Padigaru, Muralid
APPLICANT: Miller, Charles
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OR APPLICATION NUMBER: 60/263,351
OR PILING DATE: 2001-01-30
OR APPLICATION NUMBER: 60/272,870
OR FILING DATE: 2001-03-02
OR APPLICATION NUMBER: 60/275,990
OR APPLICATION NUMBER: 60/275,990
OR FILING DATE: 2001-03-14
OR FILING DATE: 2001-03-14
OR FILING DATE: 2001-03-14
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Local Similarity 100.0%; F
nes 188; Conservative 0;
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Ballinger, Robert
Gerlach, Valerie
Spytek, Kimberly
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                                           Vernet, Corine
Taupier Jr., Raymond
Pena, Carol
                                                                                                        Wolenc, Adam
Baumgartner, Jason
Shimkets, Richard
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Patturajan, Meera
Burgess, Cahterine
              Shenoy, Suresh
Li, Li
                                                                                       Gusev, Vladimir
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Kekuda, Ramesh
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Miller, Charles
Casman, Stacie
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<sub>18en,</sub> Bryan
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Pred. No. 1.3e-104;
; Mismatches 0;
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APPLICANT:

APPLICANT:

Gerlach, Varca Gerlach, Kimberly : Spytek, Kimberly : Ratelli, Luca f: Kekuda, Ramesh Guo, Xiaojia Bryan

APPLICANT: APPLICANT:

APPLICANT:

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US-10-055-877-207
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TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-055-877-206
                                                                                    GENERAL INFORMATION:
APPLICANT: DeCristofaro, Marc
APPLICANT: Padigaru, Muralidl
APPLICANT: Miller, Charles
APPLICANT: Tchernev, Velizar
                                                                                                                                                                                                  Sequence 207, Application US/10055877 Publication No. US20050288241A1
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Best Local Similarity
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APPLICANT:
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PRIOR APPLICATION NUMBER: 60/272,870
PRIOR FILING DATE: 2001-03-02
PRIOR APPLICATION NUMBER: 60/275,990
PRIOR FILING DATE: 2001-03-14
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PRIOR FILING DATE: 2001-01-25
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PRIOR APPLICATION NUMBER: 60/263,351
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PRIOR APPLICATION NUMBER: 60/264,478
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Padigaru, Muin...
Miller, Charles
Miller, Charles
Zhong, Mei
Anderson, David
Ballinger, Robert
Gerlach, Valerie
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Pred. No. 6.7e-84;
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APPLICANT:

Andrew, David

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RESULT 4
US-10-055-877-209
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US-10-055-877-207
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LENGTH: 189
TYPE: PRT
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PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR FILING DATE: 2001-01-3
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR APPLICATION NUMBER: 60/263,799
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TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
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CURRENT APPLICATION NUMBER: US/10/055,877
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APPLICATION NUMBER: 60/275,990
FILING DATE: 2001-03-14
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APPLICATION NUMBER: 60/263,351
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                                                                                                                                                                                                                                                                            CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
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  Application US/10055877
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US-10-055-877-209
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CURRENT APPLICATION NUMBER: US/10/055,877

CURRENT FILING DATE: 2002-01-22

PRIOR APPLICATION NUMBER: 60/262,892

PRIOR FILING DATE: 2001-01-19

PRIOR PILING DATE: 2001-01-19

PRIOR PPLICATION NUMBER: 60/263,598

PRIOR PPLICATION NUMBER: 60/263,799

PRIOR APPLICATION NUMBER: 60/264,117

PRIOR PILING DATE: 2001-01-24

PRIOR APPLICATION NUMBER: 60/264,117

PRIOR APPLICATION NUMBER: 60/264,117

PRIOR APPLICATION NUMBER: 60/264,139

PRIOR APPLICATION NUMBER: 60/264,139

PRIOR PRILING DATE: 2001-01-25

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PRIOR PRILING DATE: 2001-01-25
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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 209
LENGTH: 189
TYPE: PRT
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PRIOR FILING DATE: 2001-01-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Boldog, Ference
TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
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OR FILING DATE: 2001-03-02
OR APPLICATION NUMBER: 60/275,990
OR FILING DATE: 2001-03-14
OR APPLICATION NUMBER: 60/275,927
OR FILING DATE: 2001-03-14
                                                                                                                                       Local
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                                                                                                                          104;
                                                                                                                      n 53.3%; Score 548.5; DB 6;
Similarity 55.6%; Pred. No. 1.6e-52;
D4; Conservative 26; Mismatches 56;
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Kekuda, Ramesh
Guo, Xiaojia
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CCGSKDSTCSHCPSCPILWTRNGSHCYYFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVK 120
                                        MTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
                                                                             MADSSIYSTLELPEAPQVQDESRWKLKAVLHRPHLSRFAMVALGLLTVILMSLLMYQRIL 60
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Taupier Jr., Raymond
Pena, Carol
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Spytek, Kimberly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Padigaru, Murai
Miller, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patturajan, Meera
Burgess, Cahterine
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Mezes, Peter
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Andrew, David
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Shimkets, Richard
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Wolenc, Adam
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Sequence 40, Application US/108
Publication No. US20050256039A1
GENERAL INFORMATION:
                                                                                                                                                    LENGTH: 188
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-842-206-40
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US-10-416-384-1
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APPLICANT: GILLESPIE, STEPHEN
TITLE OF INVENTION: Vaccine Component
FILE REFERENCE: 068804-0000001
CURRENT APPLICATION NUMBER: US/10/416,384
CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: PCT/GB01/04985
PRIOR FILING DATE: 2001-11-09
PRIOR FILING DATE: 2001-11-09
PRIOR FILING DATE: 2000-11-09
                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
SOFTWARE: CuraSeqList
SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/10416384 Publication No. US20050260224A1 GENERAL INFORMATION:
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SEQ ID NO 1
LENGTH: 189
                                                                      Matches
                                                                                     Query Match
Best Local Similarity
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Best Local Similarity
                                                                                                                                                                                                                                                                                                   FILE REFERENCE: Cura 570A
CURRENT APPLICATION NUMBER: US/10/842,206
CURRENT FILING DATE: 2004-05-10
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Peterson, Jeffrey D
APPLICANT: Sciore, Paul J
TITLE OF INVENTION: NOVEL FIBROBLAST GROWTH FACTORS AND METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Plasmodium yoeli
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  107 GSHLLTEPDN--QGVK----LFG--EYLGQDFYWIGLRNIDGWRWEG----GPALSLRIL 154
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                                                                      Conservative
                                                                                     4.1%;
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27.5%;
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Pred. No.
                                                                                     Score 42; DB 6;
Pred. No. 1.2e+03;
                                                                   Mismatches
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                                                                 28; Indels
                                                                                                           Length 188;
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APPLICANT: Biogen, Inc.
APPLICANT: Banicola-Nadel, Michele
APPLICANT: Adkins, Heather
APPLICANT: Miklasz, Steven Donald
APPLICANT: Miklasz, Steven Donald
APPLICANT: Rayhorn, Paul
APPLICANT: Williams, Kevin
TITLE OF INVENTION: Cripto-Specific Antibodies
FILE REFERENCE: BGNA117CPPCCN
CURRENT APPLICATION NUMBER: US/10/945,853
CURRENT APPLICATION NUMBER: PCT/US02/31462
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US-10-945-853-2
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APPLICANT: Yim, Zachary
APPLICANT: Hahne, William
FILE REFERENCE: Cura-57 AM
CURRENT APPLICATION NUMBER: US/10/980,459
CURRENT APPLICATION NUMBER: 10/435,087
PRIOR APPLICATION NUMBER: 10/435,087
PRIOR FILING DATE: 2003-5-9
PRIOR APPLICATION NUMBER: 10/842,179
PRIOR FILING DATE: 2004-5-10
PRIOR FILING DATE: 2004-5-10
PRIOR APPLICATION NUMBER: 60/541,728
PRIOR APPLICATION NUMBER: 60/541,728
PRIOR FILING DATE: 2004-2-4
PRIOR FILING DATE: 2004-2-8
PRIOR FILING DATE: 2004-2-18
PRIOR FILING DATE: 2004-2-18
PRIOR FILING DATE: 2004-2-18
PRIOR FILING DATE: 2004-2-18
PRIOR FILING DATE: 2004-2-18
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; SEQ ID NO 32
; LENGTH: 188
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Best Local Similarity 28.4%;
Matches 19; Conservative
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                                                                                                                                                                                                                                                                               Sequence 2, Application US/10945853 Publication No. US20050255117A1
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APPLICANT: Chillakuru, Raj
APPLICANT: Jeffers, Michae
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APPLICANT:
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PRIOR FILING DATE: 2004-10-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      155 TNSLIQR 161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         111 TSECIFR 117
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Chillakuru, kaj.
Chiere, Michael
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                                                                                                                                                                                                                                                                                                                                                                                                            TSECIFR 117
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Valax, Pascal
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chael E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 42; DB 6; Length 188; Pred. No. 1.2e+03;
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12;

Gaps

PRIOR

Baker, Kevin P.

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CURRENT APPLICATION NUMBER: US/10/467,657
CURRENT FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: GB-0103424.8
PRIOR FILING DATE: 2001-02-12
NUMBER OF SEQ ID NOS: 9218
SOPTWARE: SeqWin99, version 1.04
SEQ ID NO 2750
LENGTH: 188
TYPE: PRT
RESULT 10
US-10-131-826A-240
; Sequence 240, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-945-853-2
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US-10-467-657-2750
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Best Local Similarity
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APPLICANT: FONTANA MARIA Rita
APPLICANT: FIZZA MARIAGRAZIA
APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OR FILING DATE: 2002-10-01
OR APPLICATION NUMBER: PCT/US02/11950
OR ETLING DATE: 2002-04-17
OR APPLICATION NUMBER: 60/286,782
OR FILING DATE: 2001-04-26
OR APPLICATION NUMBER: 60/293,020
OR FILING DATE: 2001-05-17
OR FILING DATE: 2001-05-17
                                                                                                                                                                                                                                                                                        Local Similarity
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FILING DATE: 2001-06-26
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                                                                                                                          128 F 128
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                                                                                                                                                                                               --NWHGQGQTLAMR-----TWKIGLCDLNGIQPSLHLLRLRFIWACIFIV 127
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Pred. No. 1.8e+03;
1; Mismatches 22;
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Pred. No. 1.4e+03;
9; Mismatches 30;
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RESULT 11
US-10-467-657-246
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US-10-131-826A-240
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PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
PRIOR APPLICATION NUMBER: 60/059117
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
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LENGTH: 189
TYPE: PRT
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APPLICANT:
APPLICANT:
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TITLE OF INVENTION: SECRETED AND TRANSMEMERANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
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PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
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PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
PRIOR APPLICATION NUMBER: 60/059352
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PRIOR APPLICATION NUMBER: 60/059184
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                                                                                                                              142 RWEGGP-----ALSLRILTNSLIQRCGAIHR----NGLQASSCEVALQWICKKV 186
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                                                                                                                                                                                                                   88 YFSMEKKDWNSSLKFCADKGSHLLTFPDNQGVKLFG-----EYLGQDFYWIGLRNIDGW 141
                                                                                                                                                                                                                                                                                                        28 AVLHRPHLSRFAMVALGLLTVILMSLLMYQRILCCGSKDSTCSHCPSCPILWTRNGSHCY 87
                                                                                       78 GYKPSPPNGCGSPLFGVHLNIGIPSLTKCCNQHDRCYETCGKSKNDCDEEFQYCLSKI 135
                                                                                                                                                                                                                                                                                                                                                    ch 3.9%; Score 40.5; DB 6; I Similarity 19.1%; Pred. No. 1.8e+03; 34; Conservative 21; Mismatches 60
                                                                                                                                                                                                                                                                   2 ALLSRPALT-------LILLLMAAVVRCQEQAQTT-----
                                                                                                                                                                            -----DWRATLKTIRN-GVHKIDTYLNAALDLLGGEDGLCQYKCSD----GSKPFPRY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Godowski, Paul J. Gurney, Austin L.
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                                                                                                                                                                                                                                                                                                                                                                                                    DB 6;
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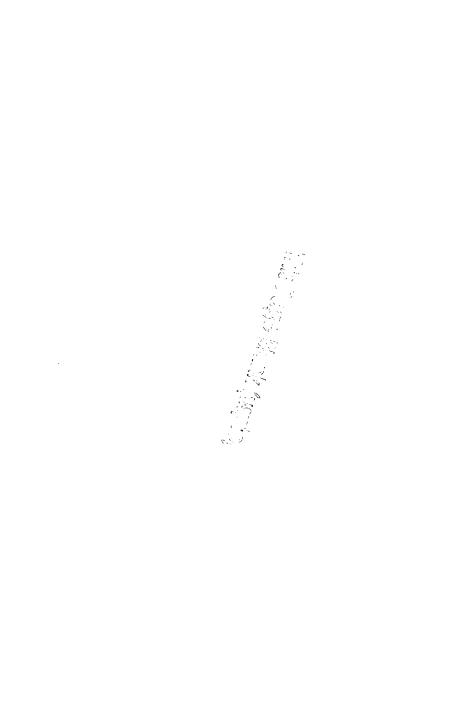
Sequence 246, Application US/10467657 Publication No. US20050260581A1 GENERAL INFORMATION:

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CURRENT APPLICATION NUMBER: US/10/467,657; CURRENT FILING DATE: 2003-08-11; PRIOR APPLICATION NUMBER: GB-0103424.8; PRIOR FILING DATE: 2001-02-12; NUMBER OF SEQ ID NOS: 9218; SOFTWARE: SegWin99, version 1.04; SEQ ID NO 246; LENGTH: 189; TYPE: PRT; ORGANISM: Neisseria gonorrhoeae US-10-467-657-246
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US-10-467-657-2690
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PRIOR FILING DATE: 2001-02-12
NUMBER OF SEQ ID NOS: 9218
SOFTWARE: SegWin99, version 1.04
SEQ ID NO 2690
LENGTH: 189
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Best Local Similarity 25.0%;
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APPLICANT: Biogen, Inc.
APPLICANT: Sanicola-Nadel, Michele
APPLICANT: Adkins, Heather
APPLICANT: Adkins, Heather
APPLICANT: Miklasz, Steven Donald
APPLICANT: Rayhorn, Paul
APPLICANT: Schiffer, Susan Gail
APPLICANT: Williams, Kevin
TITLE OF INVENTION: Cripto-Specific Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: CHIRON SDA
APPLICANT: FONTANA MARIA Rita
APPLICANT: FIZZA MARIAGRAZIA
APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/467,657
CURRENT FILING DATE: 2003-08-11
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APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
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Pred. No. 1.8e+03;
5; Mismatches 16; Indels
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; LENGTH: 188
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-945-853-1
                                                                                        RESULT 15
US-10-528-031-4
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                       Sequence 4, Application US/10528031 Publication No. US20050262577A1 GENERAL INFORMATION:
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    APPLICANT: ORIDIS BIOMED Forschungs- und Entwicklungs
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FILE REFERENCE: BGNA117CPPCCN
CURRENT APPLICATION NUMBER: US/10/945,853
CURRENT FILING DATE: 2004-09-20
PRIOR APPLICATION NUMBER: PCT/US02/31462
PRIOR FILING DATE: 2002-10-01
PRIOR FILING DATE: 2002-10-01
PRIOR PILING DATE: 2002-04-17
PRIOR PILING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: 60/286,782
PRIOR APPLICATION NUMBER: 60/293,020
PRIOR FILING DATE: 2001-05-17
PRIOR PILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/301,091
PRIOR APPLICATION NUMBER: 60/367,002
PRIOR PILING DATE: 2001-05-26
PRIOR PILING DATE: 2002-03-22
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 1704
SOFTWARE: pt SEQ_genes Version 1.0
SEQ ID NO 1193
LENGTH: 188
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Publication No. US20050255114A1
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Labat, Ivan
APPLICANT: Stache-Crain, Birgit
APPLICANT: Andarmani, Susan
APPLICANT: Tang, Y. Tom
TITLE OF INVENTION: Methods for Diagnosis and Treatment
FILE REFERENCE: 821A
CURRENT APPLICATION NUMBER: US/10/821,234
CURRENT FILING DATE: 2004-04-07
PRIOR APPLICATION NUMBER: US 60/462,047
PRIOR PILING DATE: 2003-04-07
                                                                                                                 3.6%; Score 37; DB 6; Length 188; Local Similarity 20.0%; Pred. No. 4.2e+03; es 11; Conservative 11; Mismatches 15; Indels
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                                                     16 POVODESRWKLKAVLHRPH-----
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PDFRDISKWNNRVVSNLLYYQTNYLVVAAMMISIVGFLSPFNMILGGIVVVLVFT 78
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APPLICANT: Guelly, Christian
APPLICANT: Buck, Charles R.
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                                 hypothetical protein yggE [imported] - Chlamydophila pneumoniae (strain J138) c;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae (c;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004 C;Accession: C86508 R;Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, F.; Ouchi, K.; Shiba, Nucleic Acids Res. 28, 2311-2314, 2000 Nucleic Acids Res. 28, 2311-2314, 2000 A;Title: Comparison of whole genome sequences of chlamydia pneumoniae J138. A;Accession: C86508 A;Accession: C86508
     A;Status: preliminary A;Molecule type: DNA
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hypothetical protein F40G9.10 - Caenorhabditis elegans (,Species: Caenorhabditis elegans C,Species: Caenorhabditis elegans C,Accession: T33623 C,Accession: T33623 C,Accession: T34623 C,Accession: T35623 C,Accession: The EMBL Data Library, P. submitted to the EMBL Data Library, October 1998 A,Description: The sequence of C. elegans cosmid F40G9. A,Reference number: Z21378
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R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, C.; Dotson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, C.; Dotson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, C.; Nucleic Acids Res. 28, 1397-1406, 2000
Nucleic Acids Res. 28, 1397-1406, 2000
A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumo A;Reference number: A81500; MUID:20150255; PMID:10684935
A;Accession: E81555
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A;Residues: 1-188 <ARN>
A;Cross-references: UNIPROT:Q9Z944; UNIPARC:UPI00000D4127; GB:AE001600; GB:AE001363; NII
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                                                                                                                                  09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                   183
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                                            RESULT 6
AH1128
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acetyltransferase homolog lmo0431
C;Species: Listeria monocytogenes
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A;Experimental source: strain 1021, megaplasmid pSymB
R;Galibert, F.; Finan, T.M.; Long, S.R.; Puhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler,
pela, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.;
L.; Hyman, R.W.; Jones, T.
Science 293, 668-672, 2001
A;Authors: Kahn, D.; Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, B.; Komp, C.; Lelaure,
hebault, P.; Vandenbol, M.; Vorholter, F.J.; Weidner, S.; Wells, D.H.; Wong, K.; Yeh, K.
A;Title: The composite genome of the legume symbiont Sinorhizobium meliloti.
A;Reference number: A96039; MUID:21368234; PMID:11474104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Finan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Heroc. Natl. Acad. Sci. U.S.A. 98, 9889-9894, 2001
A;Title: The complete sequence of the 1,683-kb pSymB megaplasmid from the N2-fixing A;Reference number: A95842; MUID:21396508; PMID:11481431
A;Accession: B95865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Sinorhizobium melllot1
C;Date: 24-Aug-2001 #sequence_revision 24-Aug-2001 #text_change 09-Jul-2004
C;Accession: B95865
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A;Experimental source: strain Bristol N2; clone F40G9
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary; translated A;Molecule type: DNA A;Residues: 1-188 <GRA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                conserved hypothetical protein [imported] - Sinorhizobium meliloti (strain 1021) magapla C;Species: Sinorhizobium meliloti
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                                                                                                                                                                                                                                                                                                                                                                                                                                A;Gene: SMb20186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:Q92WX6; UNIPARC:UPI00000CB446; GB:AL591985; PIDN:CAC48586.1;
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A; Residues: 1-189 < KUR>
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R;Finan, T.M.
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A; Introns: 63/3; 99/1; 113/3; 153/3
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Best Local
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les 31; Conserv
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                                                                                                   68
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22; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLL---TFPDNQ------GVNLFQEY 125
                                                 RDIDGWRWEDGPALSISIISNSV 158
                                                                                                   RD-NVNVTSGAEKLQVVDPSATIQRYACRDCGTHMY----GRIENTKHPFYGLDFVHTEL
                                                                                                                                                     RDWNSSLK-----
                                                                                                                                                                                                    CASNPVTVRIGSQTA-----HNHACG-
                                                                                                                                                                                                                                                CVSYLVMVALGLLTVILMSLLLYQRTLCCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEK 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WFSYTNFCYKSTARAANFNDAHNACRSEGSELASIHSLTENQFLVQLSAAGNRVNSKTNY
SDETGWSPPEFAAFVSSIIESGV
                                                                                                                                                                                                                                                                                                  Conservative
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24.7%;
                                                                                                                                                                                                                                                                                                  5.5%; Score 56.5; DB 2;
21.7%; Pred. No. 5.1e+02;
tive 15; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12;
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Pred. No. 2.7e
2; Mismatches
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                                                                                                                                                  -- FCADKGSHLLTFPDNQGVNLFQEYVGEDFYWIGL 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5; DB 2;
2.7e+02;
                                                                                                                                                                                                                                                                                                     54;
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[imported]

Listeria

monocytogenes

(strain

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Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; MacA; C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AH1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AH1118
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker, Dominguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 294, 849-852, 2001
A;Authors: Kreft, J; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.;
A;Authors: Kreft, J; Kuhn, M.; Tierrez, A.; Vazquez-Boland, J.A.;
A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AC1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acetyltransferase homolog lin0451 [imported] - Listeria innocua (strain Clip11262)
C;Species: Listeria innocua
C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AC1489
R;Glaser: P; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker
R;Glaser: P; Frangeul, L.; Buchrieser, C.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.
J; Jones, L.M.; Karst, U.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-189 <GLA>
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                 RESULT
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A;Experimental source: strain Clip11262
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A;Molecule type: DNA
A;Residues: 1-189 <GLA>
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acetyltransferase,
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Best Local S
Matches 28
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                                                                                                                                                                                                                     SLKFCADKGSHLLTFPDNQGVNLFQBYVGEDFYWIGLRDIDGWRWED----GPALSLSIL 154
                                                                                                         NHLVSPK----KRRGLRVAPICVKKNAWI 141
                                                                                                                                            SNSVVQKCGTIHRCGLH-ASSCEVALQWI 182
                                                                                                                                                                                      SLPFYSDFGKH-ITFGKNIFINLNVTFV-----
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31.5%;
family
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31.5%;
  [imported] -
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Pred. No. 5.7e+02;
                                                                                                                                                                                                                                                                            Score 56; DB 2;
Pred. No. 5.7e+02;
8; Mismatches 33
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    Streptococcus pneumoniae
                                                                                                                                                                                                                                                                              33;
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      (strain TIGR4)
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Voss, H.; Wehland,
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Best Local (
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                                                                                                                                                                                                                                           Local
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Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K. ansen, N.F.; Hughes, B.; Huizar, L. Nature 408, 816-820, 2000

A; Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C. C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H. A; Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W. D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W. A; Reference number: A86141; MUID:21016719; PMID:11130712

A; Status. Prolim.
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C;Date: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 31-Dec-2004
C;Accession: A95110
C;Accession: A95110
R;Tettelin, H.; Welson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heicon, J.D.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapple, nson, T.; Hickey, E.K.; Holt, I.E.
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A;Residues: 1-189 <KUR>
A;Cross-references: UNIPROT:Q97R76; UNIPARC:UPI0000051661; GB:AE005672; PIDN:AAK75074.1,
A;Experimental source: strain TIGR4
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A;Accession: A95110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Map position: 1
C;Superfamily: auxin-induced protein aux28
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A; Residues: 1-189 <STO>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95 DWNSSLKFCADKGSHLLTFPDNQGV-----NLFQEYVGEDFYWIGLRDIDGWRWEDGPAL 149
                                                                                                                                                                                                                                                                                                                 3 DNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYL-----VMVALGLLTVILMSLLL 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                          ENSVVSSVEDESLPVV-----KSQAVGWPPVCSYRRKKNNEEASKAIGYVKV-SMDGVP 104
YMRKIDLGSSNSYINLVTVLENLFGCLGIGVAKEGKKCEYIIIYEDKDRDW 155
                                                                                                  YQRTLCCGSKGFMCSQCSRCPNLW-----MRNGSHCYY---FSMEKRDW
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                                                                                                                                                                                                                                                                                                                                                                                                                                     5.3%; Score 55; DB 2;
25.2%; Pred. No. 7.1e+02;
tive 16; Mismatches 43
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A;Gene: IAA6
C;Superfamily
C;Keywords: n
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C/Species: Streptococcus pneumoniae
C/Species: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 31-Dec-2004
C/Accession: G97978
R;Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, L.; Burgett, S.; DeHoff, B.
e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren,
e, R.; Ling, P.M.; Winkler, M.E.
y, P.; Sun, P.M.; Winkler, M.E.
J. Bacteriol. 183, 5709-5717, 2001
A;Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas,
A;Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A;Reference number: A97872; MUID:21429245; PMID:11544234
A;Accession: G97978
                                                                                   RESULT 12
D81564
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G97978
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S58493
hypothetical protein CP0547 [imported] - Chlamydophila pneumoniae (strain AR39) C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004
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R;Abel, S.; Nguyen, M.D.; Theologis, A.

J. Mol. Biol. 251, 533-549, 1995

A;Title: The PS-IAA4/5-like family of early auxin-inducible A;Reference number: S58491; MUID:95387393; PMID:7658471

A;Accession: S58493

A;Status: nucleic acid sequence not shown
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 29-Nov-1995 #sequence_revision 01-Mar-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Gene: spr0855
C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-189 < KUR>
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A; Residues: 1-189 < ABE>
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Best Local S
Matches 28
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Best Local
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                                                                                                                                                                                                                                            136
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 5.3%; Score 55; DB 2; Similarity 25.2%; Pred. No. 7.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                              RDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQWICEKV 186
                                                                                                                                                                                                                                                                                                DAEAMFDYASDKGNTRYTFPTNQSLEETKNNIAQFYLANPLGRWGIELKSNGKFIGTIDL
                                                                                                                                                                                                                                                                                                                                                     DWNSSLKFCADKGSHLLTFPDNQGV-----NLFQEYV-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENSVVSSVEDESLPVV-----KSQAVGWPPVCSYRRKKNNEEASKAIGYVKV-SMDGVP 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ribosomal protein serine N-acetyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                       5.2%; Score 53.5; DB 2; Length 189; ilarity 22.5%; Pred. No. 9.8e+02; Conservative 15; Mismatches 42; Indels 2
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                                                                                                                                                                                          PVLKKAAIGYIINQ---TYWNQGLTTETNRAVIELAFEKI 128
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     C;Species: Listeria monocytogenes
C;Date: 27-Nov-2001 #sequence_revision
C;Accession: AC1355
R;Glaser, P.; Frangeul, L.; Buchrieser,
                                                                                                               methylphosphotriester-DNA alkyltransferase and transcription regulator homolog
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RESULT
T19559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:Q9K250; A;Experimental source: strain AR39, C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Accession: D81564
R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, C. Nucleic Acids Res. 28, 1397-1406, 2000
Nucleic Acids Res. 28, 1397-1406, 2000
A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumc A;Reference number: A81500; MUID:20150255; PMID:10684935
A;Accession: D81564
                                                                                                                                                                                                                                                                                                                                                                                A; Experimental source: C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  submitted to the EMBL Data Library, A;Reference number: Z19142 A;Accession: T19559
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A; Map position: 5
                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:017613; UNIPARC:UPI00000783D6; EMBL:Z81043; PIDN:CAB02800.1; A;Experimental source: clone C29F3
                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Residues: 1-189 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Status: preliminary; translated from
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R;Matthews, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein C29F3.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
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C;Superfamily: Chlamydia
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A; Residues: 1-189 < REA>
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                                                                                                                  111 ----LTFPDNQGVNLFQEY------VGEDFYWIG-----LRDIDGWR 142
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                                                                                                                                                                                                                                          28;
                                                                                                                                                                                                                                                               Similarity
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DITGDCLSMDLGNNGQYNDITCDAETAYSCGKPAA 189
                                   WEDGPALSISIS----NSVVQKCGTIHRCGLHAS 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIHPRDKMKYRFEVLQAVIEILGLGVLILVFDIIGCFLAFLVAIILSLLLY-----CNST 164
                                                                                                                                                         CPAGWFQFQRATGLWCYIFATPGAGWTTPQAACQANYGANLNGFESAAERTQFIRKKLKE
                                                                                                                                                                                                   CPNLWMR----NGSHCYYFSMEKRDWNSSLKFC-ADKGSHL----
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                                                                                 FCSNYSKFPEDMLASNLAPYTFVHIGAMRQCAPCTVNDPFVWLNGVSNDNTFANDYDSLY 154
                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.2%; Score 53.5; I larity 33.3%; Pred. No. 9.80 Conservative 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pneumoniae hypothetical protein CPn0218
                                                                                                                                                                                                                                                           5.1%;
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                                                                                                                                                                                                                                      Score 53; DB 2;
Pred. No. 1.1e+03;
7; Mismatches 54
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G.; Salzberg
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L.; Buchrieser,

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Amend,

A.; Baquero,

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Bloecker

27-Nov-2001 #text_change 09-Jul-2004

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A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-188 <GLA-
A;Cross-references: UNIPROT:Q8Y533; UNIPARC:UPI00000CF1EE; GB:NC_003210; PIDN:CAD00321.
A;Cross-references: strain EGD-e
C;Genetics:
C;Genetics:
A;Gene: lmo2243
A;Gene: lmo2243
C;Superfamily: methylphosphotriester-DNA methyltransferase; methylphosphotriester-DNA m
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A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Maok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Title: Comparative genomics of Listeria species.

A;Reference number: AB1077; MUID:21537279; PMID:11679669

A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
S74560
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C;Accession: S74560; S45136
C;Accession: S74560; S45136
C;Accession: S74560; S45136
C;Accession: S74560; S45136
C;Accession: S74560; S45136
C; Solumbra S; Shuppo, S; Takeuchi, C; Wada, T; Watanabe, A; Yamada, M; Yasuda DNA Res. 3, 109-136, 1996
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis
                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 1-188 <KAN>
A;Residues: 1-188 <KAN>
A;Residues: 1-188 <KAN>
A;Residues: Library: DNIPARC:UPI000013A65A; EMBL:D90900; GB:AB001339; NII
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
A;Note: the nucleotide sequence. T.
Boerner, T.
Boerner, T.
Boubmitted to the EMBL Data Library, November 1993
A;Description: Cloning, sequencing and inactivation of the Synechocystis sp. PCC 6803 OR
A;Reference number: S45136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein sl10226 - Synechocystis sp. (strain PCC 6803)
N;Alternate names: hypothetical protein 184
C;Species: Synechocystis sp.
A;Variety: PCC 6803
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A;Accession: $74560
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Best Local S
Matches 18
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                                                                                                                                                                                                                                                                                                                                                                                                                  Molecule type: DNA
Residues: 1-184 <WIL>
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Local Similarity 26.9%;
nes 18; Conservative
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Local Similarity 26.7%;
nes 20; Conservative 11
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108
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                                                        IHRCGLHASSCEVAL 179
                                                                                                             GKNLLIVSDTTGLOFIPQGVALLFYGVAGSTVAGYLWLT-MALNVGSGYNEFNKKSGQVT 107
   IFRWGFPGKNRRIEL 122
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    k; Score 51.5; DB 2; Length 188;
    k; Pred. No. 1.5e+03;
    11; Mismatches 41; Indels

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Search completed: January 9, 2006, 15:36:35 Job time : 19.3009 secs



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Maximum DB
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Perfect score:
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         Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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545.5
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seq length: 189
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Gapop 10.0 , Gapext 0.
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1: uniprot_sprot:*
2: uniprot_trembl:*
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Copyright (c) 1993 - 2006 Compugen
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064335 RAT
088713 MOUSE
075613 HUMAN
043198 HUMAN
043198 CHICK
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08C634 MOUSE
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Hanke T., Corral L., Vance R.E., Raulet D.H.;

"2F1 antigen, the mouse homolog of the rat 'ma

"2F1 antigen, is a lectin-like type II

expressed by natural killer cells.";

Eur. J. Immunol. 28:4409-4417(1998).
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10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Mast cell function-associated antigen 2F1 (Killer c
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01-AUG-1999
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MEDLINE=99077501; PubMed=9862665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of MAFA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Voehringer D., Kaufmann M., Pircher H.; "Genomic structure, alternative splicing, killer cell lectin-like receptor G1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=129/SvevTACfBr; TISSUE-Spleen; MEDLINE=21115136; PubMed=11220622; DO
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NCBI_TaxID=10090;
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Mammalia; Eutheria; Euarchontoglires; Glires;
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                                                                                                                                                                                       30; GO:0016021; C:integral to membrane; 30; GO:0005529; F:sugar binding; TAS. 30; GO:0007166; P:cell surface receptor InterPro; IPR001304; Lectin_C.
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AF081675; AAC32200.1; -; mRNA. EMBL; AF097358; AAD03719.1; -; mRNA. HSSP; Q13241; 186E.
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DOI=10.1002/(SICI)1521-4141(199811)28:11<3755::AID-IMMU3755>3.0.CO;2-3;
Butcher S., Arney K.L., Cook G.P.;
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MEDLINE=99077194; PubMed=9862378;
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CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
                                                                                        MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
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oqlires; Primates; Catarrhini;
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RESULT 4

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A Lamers M.B.A.C., Lamont A.G., Williams D.H.;

A Lamers M.B.A.C., Lamont A.G., Williams D.H.;

L Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.

EMBL; AF034952; AAC34731.1; -; mRNA.

R EMSP; Q13241; 18EE.

RGO; G0:00016021; C:integral to membrane; TAS.

R GO; G0:0004972; F:receptor activity; TAS.

R GO; G0:000529; F:sugar binding; TAS.

R GO; G0:000529; F:sugar binding; TAS.

R GO; G0:000529; F:sugar binding; TAS.

R GO; G0:0006954; P:cell surface receptor linked signal transdu. . . .

R GO; G0:0006954; P:inflammatory response; TAS.

R InterPro; IPR001304; Lectin C. . .

P Defam. PP0006951; Lectin C. . 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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MEDLINE-99438735; PubMed=9765598; DOI=10.1016/S0167-4781(98)00107-9;

Lamers M.B., Lamont A.G., Williams D.H.;

"Human MAFA has alternatively spliced variants.";

Biochim. Biophys. Acta 1399:209-212(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human).
Eukaryota; Metazoa; C
Mammalia; Eutheria; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-JUN-1998 (TrEMBLrel. 26, Last annotation update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mast cell function-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9606;
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189 AA; _21079 MW; 15E042AD40B2B4F6 CRC64;
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                                                                                                                                              LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL
                                                                                                                                                                                                                                  CCGSKGFMCSQCSRCPNLMMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
                                                                                                                                                                                                                                                                                                                                                              MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL
HGVCKKV
                                                                                                 LIQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                                                                                                                                                       CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMS
                                                                                                                                                                                                                                                                                                        QWICEKY
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                                                                                                                                                                                                                                                                                                                                                                                                                                       50.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                 29;
                                                                                                                                                                                                                                                                                                                                                                                                               Score 525.5; DB 2;
Pred. No. 8.1e-43;
Pred. No. 8.7;
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QGZYP6_CHICK PRELIMINARY;
QGZYP6;
Q5-7UL-2004 (TrEMBLrel. 27,
05-7UL-2004 (TrEMBLrel. 27,
05-7UL-2004 (TrEMBLrel. 27,
05-7UL-2004 (TrEMBLrel. 27,
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Gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
PROSITE; PS00615; C_TYPE_LECTIN_1;
PROSITE; PS50041; C_TYPE_LECTIN_2;
SEQUENCE 188 AA; 21053 MW; 6AD5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR002353; AntifreezeII.
InterPro; IPR001304; Lectin_C.
Pfam; PR00059; Lectin_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases. EMBL; AJ634337; CAG25421.1; -; mRNA.
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reveals that the NK Complex and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34 CVSYLVMVALGLLTVILMSLLLYQRTLCCGSKGFM--CSQCSRCPNLWMRNGSHCYYFSM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                   DESNWTSSONNCSALGASLAVFDSAEDLSFTMRHKGSSPHWVGL-SREGKEHPWEWVNRS
                                                                                                                                                                                                                                                                                                                                                                               EKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGEDFYWIGLRDIDG----WRWEDGP
                                                                                                                                                                                                                                                                                                                                                                                                                                CVTFQLTMA-AVFTVLLITAVAF-----AVQAFQPHPQPCAQCPFDWIGFRGKCYYFSE
                                                                                                                                                                                                                                      PLSHLFQVQGDGL---
                                                                                                                                                                                                                                                                                         ALS--LSILSNSVVQKCGTIHRCGLHASSCEVALQWICEK 185
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F:sugar binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15.9%;
25.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kingdom.
                                                                                                                                                                                                                                               CAYLGDAGLSSSHCSTRRNWVCTK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33;
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Last sequence update)
Last annotation update)
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and the MHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 164.5; DB Pred. No. 9.4e-08
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ancestral
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CLCSA HID ID CLCSA HAC Q9 DT 110 DT 110 DT 113 DE C-CHO NA MAC QS HO OCC MAC QS OX NCC NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX NCC CX
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Best Local S
Matches 39
                                                                           CLC5A HUMAN STANDARD; PRT; 188 AA.
Q9NY25; Q9UKQ0;
10-MAY-2005 (Rel. 47, Created)
10-MAY-2005 (Rel. 47, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
C-type lectin domain family 5 member A (C-type lectin member 5) (Myeloid DAP12-associating lectin) (MDL-1).
Name-CLEC5A; Synonyms=CLECSF5, MDL1;
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE;
PROSITE;
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases. EMBL; AJ634334; CAG25418.1; -; mRNA. HSSP; Q9HBFO; 1KJJ.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00059; Lectin C; 1.
PRINTS; PR00356; ANTIFREEZEII.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thesis (2002),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rogers S.L.; "Characterisation of C-type lectin-like receptors in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reveals that the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Bone marrow;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Characterisation of C-type lectin-like reveals that the NK Complex and the MHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=15749883;
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                                                                                                                                                                                                                                                                                                                                    HUMAN
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InterPro; IPR002353; AntifreezeII
InterPro; IPR001304; Lectin_C.
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PS00615; C_TYPE_LECTIN_1; UNKNOWN_1.
PS50041; C_TYPE_LECTIN_2; 1.
188 AA; 20997 MW; 9FD58D2D9BF9FE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGEDFYWIGLR---DIDGWRWEDGPA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Department of Pathology and Microbiology, University ol, United Kingdom.
                                                                        Chordata; Craniata;
                                                  Euarchontoglires;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.9%;
24.5%;
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Pred. No. 9.4
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                                                                           Vertebrata; Euteleostomi;
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                                                                                                                                                                              superfamily
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DARARA PARARA PA
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CC -:- SURINIT: Interacts with TYROBP.
                                                                                                                                                                                                                                                EMBL;
HSSP;
                                                                                                                                            Ensembl; ENSG00000090265
HGNC; HGNC:2054; CLECSA.
MIM; 604987; -.
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Hillier L.W., Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H.,
Wagner-McPherson C., Layman D., Maas J., Jaeger S., Walker R.,
Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERACTION WITH TYROBP, AND MUTAGENESIS OF LYS-16.

MEDLINE=99380598; PubMed=10449773; DOI=10.1073/pnas.96.17.9792;

MEDLINE=99380598; PubMed=10449773; DOI=10.1073/pnas.96.17.9792;

Bakker A.B.H., Baker E., Sutherland G.R., Phillips J.H., Lanier L.L.;

"Myeloid DAP12-associating lectin (MDL)-1 is a cell surface receptor involved in the activation of myeloid cells.";

Proc. Natl. Acad. Sci. U.S.A. 96:9792-9796(1999).
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Mueller A., Merz H., Feller A.C.;
Muerression of MDL-1 in human blood and cell l
Submitted (JAN-2000) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                      removed
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TISSUE SPECIFICITY: Expressed in peripheral blood monocyte
the monocyte/macrophage cell lines U937 and MonoMac6, but
cell lines of other origins. Expression is down-regulated
monocytes differentiate into dendritic cells.
SIMILARITY: Contains 1 C-type lectin domain.
                ; 604987; C:integral to plasma membrane; T/GO:0005488; F:binding; TAS.
GO:0005488; P:cellular defense response; TAS.
GO:0007165; P:signal transduction; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                       European Bioinformatics Institute.
as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBUNIT: Interacts with TYF SUBCELLULAR LOCATION: Type ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Event=Alternative splicing; Named
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Swiss-Prot entry is copyright. It is produced through a deen the Swiss Institute of Bioinformatics and the EMBL European Bioinformatics Institute. There are no restrict
                                                                                                                                                                                                                                                   AF139768; AAF02491.1;
AJ271684; CAB71334.1;
AC073647; AAS07444.1;
P22897; 1EGG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IsoId=Q9NY25-1;
                                                                                                                                                                                                                     ENSG00000090269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 content is in no way modified and
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NUCLEOTIDE SEQUENCE.

RC TISSUB-Lung and heart;

RX MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RX MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
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SMART; SMO0034; CLECT; 1.

PROSITE; PS00615; C_TYPE_LECTIN_1; FALSE_NEG.

PROSITE; PS50041; C_TYPE_LECTIN_2; 1.

Alternative splicing; Glycoprotein; Immune response;
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13-SEP-2005 (TrEMBLrel. 31, Last
13-SEP-2005 (TrEMBLrel. 31, Last
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Mammalia; 1
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Chordata; Craniata; Vertebrata; Euteleostomi;
Euarchontoglires; Primates; Catarrhini; Homin
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Missing (in iso
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l; Mismatches
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OC Mammalia
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                                                                                 J. Immunol. 149:199.7-179. mRNA.

EMBL; X64719; CAA45972.1; -; mRNA.

HSSP; Q07108; 1FM5.

GG; GO:00054872; F:receptor activity; IF

R GO; GO:00054879; F:sugar binding; IEA.

GO; GO:0005479; F:sugar binding; IEA.

InterPro; IPR001304; Lectin_C.
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Best Local
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Submitted (APR-2005) to the
EMBL; BC093714; AAH93714.1;
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                                                                                                                                                                                                    "Genomic structure and strain-specific killer cell receptor NKR-P1.";
J. Immunol. 149:1957-1963(1992).
EMBL; X64719; CAA45972.1; -; mRNA.
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                                                                                                                                                                                                                                                                                                MEDLINE=92388663; PubMed=1517565; Giorda R., Weisberg E.P., Ip T.K.,
                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
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SMART; SM00034; CLECT;
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(TrEMBLrel. 25, Last annotation update)
ler cell receptor-Pl (Fragment).
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Euarchontoglires; Glires; Rodentia; Sciurogna
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MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
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"High-efficiency full-length cDNA
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MAR-2003 (TrEMBLrel. 23, Last sequence update)
MAY-2005 (TrEMBLrel. 30, Last annotation update)
MAY-2005 (TrEMBLrel. 30, Last annotation update)
MAY-2005 (TrEMBLrel. 30, Last annotation update)
MAY-2006 (TrEMBLrel. 30, Last annotation update)
MAY-2006 (TrEMBLrel. 30, Last annotation update)
MAY-2008 (TrEMBLrel. 23, Created)
MAY-2008 (TrEMBLrel. 23, Created)
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Muridae; M
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                                                                                                                                                                    annotation of 685-690(2001).
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Euarchontoglires; Glires;
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   DOI=10.1038/nature01266;
Adachi J., Bono H., Kon
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Lee N.H.,
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RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Bchriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Fletcher C.F., Forrest A., Frazer K.S.,
RA Gassterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Konngaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Konngaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Konngaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Harak A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Harak A., Hashizume W., Tarothio P., Lander E.S., Rogers J.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Yasunishi A., Sakai K., Shinasaki O., Shibata K., Shinagawa A.,
RA Yasunishi A., Sakai K., Shinasaki Y.,
RA Kana A., Hashizume W., Tarot
                                                                                                                                                                                Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P. Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W., Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T., Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T., Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M., Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y., Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H., Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagama Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T., Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=CSTBL/GJ; TISSUB=Testis;
STRAIN=CSTBL/GJ; TISSUB=Testis;
STRAIN=CSTBL/GJ; TISSUB=Testis;
STRAIN=CSTBL/GJ; TISSUB=Testis;
Carrinci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata Konno H., Okazaki Y., Muramateu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDN prepare full-length cDNA libraries for rapid discovery of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Testis;

MEDLINE=20530913; PubMed=11076881; DOI=10.1101/gr.152600;

Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,

Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,

Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,

Pujiwake S., Inoue K., Togawa Y., Izawa M., Ohara B., Watahiki M.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

RIKEN integrated sequence analysis (RISA) system-384-format

sequencing pipeline with 384 multicapillary sequencer.";
Strausberg R.L., Feinge Klausner R.D., Collins Altschul S.F., Zeeberg
                        MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6J;
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Collins F.S., Wagne Zeeberg B., Buetow

Wagner L., uetow K.H.,

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SMART; SM00034; CLECT; 1.

PROSITE; PS50041; C_TYPE_LECTIN_2;
Hypothetical protein; Lectin.
SEQUENCE 189 AA; 22107 MW; 2EEE
NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

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PubMed=10731132; DOI=10.1126/science.287.5461.2185;

Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

Adams M.D., Celniker S.E., Li P.W., Hoskins R.A., Galle R.F.,

Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,

George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,

Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,

Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
                                                                                                                                                                      01-MAY-2000 (TrEMBLrel. 13, Creat
01-MAY-2000 (TrEMBLrel. 13, Last
10-MAY-2005 (TrEMBLrel. 30, Last
CG9134-PA, isoform A (CG9134-PC,
ORFNames=CG9134;
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(2 DROME
(2 DROME PRELIMINARY)
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GO; GO:0005529; F:sugar binding; IEA
InterPro; IPR001304; Lectin_C.
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Submitted (FEB-2005) to the EMBL/Genl
EMBL, AKO76635; BAC26425.1; -; mRNA.
EMBL; BC089479; AAH89479.1; -; mRNA.
                                                                                                                     Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygo
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ensembl; ENSMUSG00000047720; Mus musculus
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                                                                                                        NCBI_TaxID=7227;
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                                                                                                                                                                                                                                                                                                                                                                                       KFCADKGSHLLTFPDNQGVNLFQEYVGE-DFYWIGL--RDIDG-WRWEDGPALSLSILSN
                                                                                                                                                                                                                                                                                                               NLHEIQDHGQCAFVHQKGIDSTSCEDQKEFICTR
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RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G., RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M., RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Borkova D., Botchan M.R., Bouck J., Bardari D., Bolshakov S., RA Borkova D., Botchan M.R., Bouck J., Broketein P., Brottier P., RA Borkova D., Botchan M.R., Bouck J., Broketein E., Center A., Chandra I., RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M., RA Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Gubrit M.M., Glasser K., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Kerriera S., Fleischmann W., RA Glodek A., Gong F., Gorrell J.H., Gu Z., Kennison J.A., Ketchum K.A., Howland T.J., Hernandez J.R., Houck J., Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A., Alashi M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A., RA Lasko P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., RA Lasko P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., RA Lasko P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., Ra Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., Ra Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H., RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H., RA Shue B.C., Stadelson D.A., Weinsechus R., Suns B., Suns 
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                                                                                                                                                                                           Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S., Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E., Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman Bl. Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A., Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q., Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M., Tereir C.
Berkeley Drosophila Genome Project;
Celniker S., Carlson J., Wan K., Pf.
Hoskins R., Stapleton M., Pacleb J.
Yu C., Rubin G.;
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Kaminker J.S., Bergman C.M., Kronmiller
Patel S., Frise E., Wheeler D.A., Lewis
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                                                                                                                                                                                                                                                                                                MEDLINE=22426069; PubMed=12537572;
Misra S., Crosby M.A., Mungall C.J
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EJ
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1. 3:RESEARCH0084.1-RESEARCH0084.20(2002)
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RESULT 12
Q95DR9 HUMAN
Q95DR9 HUMAN PRELIMINARY;
AC
Q95GR9;
DT
O1-DEC-2001 (TrEMBLrel. 19,
DT
O1-DEC-2001 (TrEMBLrel. 25,
DE Beta-glucan receptor isoform
O1-DEC-2003 (TrEMBLrel. 25,
DE Beta-glucan receptor isoform
O2 Homo sapiens (Human).
O3 Homo sapiens (Human).
O4 Enkaryota; Metazoa; Chordat;
O5 Homo.
O6 Enkaryota; Metazoa; Chordat;
O7 Mammalia; Eutheria; Euarcho;
O8 Mammalia; Eutheria; Euarcho;
O8 NCBL_TaxID=9606;
RN NUCLEOTIDE SEQUENCE.
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RN WILLMERT JA., Gordon S., B
RT "Characterization of the hu
RT Millment JA., Gordon S., B
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RT alternatively spliced isofo
RL J. Biol. Chem. 276:43818-43
DR Ensembl; ENGG0000172243; H
DR G0; G0:0016021; C:integral
DR G0; G0:00142287; F:MHC prote
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Best Local S
Matches 40
                                                     NUCLEOTIDE SEQUENCE.

TISSUE=Peripheral blood leukocyte;

TISSUE=Peripheral blood leukocyte;

MEDLINE=21570237; PubMed=11567029; DOI=10.1074

Willment J.A., Gordon S., Brown G.D.;

"Characterization of the human beta -glucan realternatively spliced isoforms.";

J. Biol. Chem. 276:43818-43823(2001).

EMBL; AF400597; AALI1713.1; -; mRNA.

HSSP; O54709; 1HQB.
 Ensembl; ENSG00000172243; Homo GO; GO:0016021; C:integral to m GO; GO:0042287; F:MHC protein b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stapleton M., Carlson J., Chavez C., Frise E., Park S., Wan K., Yu C., Rubin G.M., Celniker S. Submitted (APR-2004) to the EMBL/GenBank/DDBJ G. EMBL; AE003471; AAF47464.1; -; Genomic_DNA. EMBL; BT012477; AAS93748.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE 188 AA; C184C; I.SMAKI; SMOUGH; C TYPE LECTIN 1; PROSITE; PS50041; C TYPE LECTIN 2; SEQUENCE 188 AA; 21848 MW; 51E6
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SMART; SM00034; CLECT;
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GO; GO:0005529; F:sugar binding; IEA
InterPro; IPR001304; Lectin_C.
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ol; CG9134; Drosophila melanogaster.
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Q60SU3_CAEBR
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Best Local
                                                                                                                                                                           Query Match
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Q60SU3;
25-OCT-2004 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                               EMBL; CAACO1000113; charger binding; GO; GO:005529; F:sugar binding; InterPro; IPR001304; Lectin C.
                                                                                                                                                                                                                                                                                                                                      The C.briggase Sequencing Consortium;
The C.briggase Sequencing Consortium;
Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry v
                                                                                                                                                                                                                                                                                                                                                                                                                               Caenorhabditis briggsae.
Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        888888888888
                                                                                                                                                                                                                Hypothetical protein.
NON_TER 1
NON_TER 189 18
                                                                                                                                                                                                                                                               Pfam; PF00059; Lectin_C; 1.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hypothetical
                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                     PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=6238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=CBG20753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-OCT-2004
                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO:0008329; F:pattern recognition receptor activity; ID GO:0005529; F:sugar binding; IDA.
GO:0005529; F:sugar binding; IDA.
GO:0019733; P:antibacterial humoral response (sensu Vereb co:0019734; P:antifungal humoral response (sensu Verteb co:0009756; P:carbohydrate mediated signaling; TAS.
GO:0009756; P:cell recognition; IDA.
GO:0008307; P:cell recognition; IDA.
GO:0042832; P:defense response to pathogenic protozoa;
GO:00046803; P:phagocytosis, recognition; IDA.
GO:0046803; P:reduction of virulence; NAS.
GO:0042110; P:T-cell activation; TAS.
                                                                                                                                                                                                                                                                                                                 preliminary data.
L; CAAC01000115; CAE73324.1;
                        119
121
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                                                 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                      PS50041; C
                    VNLFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHA-SSCEV
                                                                        SKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQG-----
                                                                                                                         NSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTLCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIAVILGILCLVILVIAVVLGTMAIWRSNSGSNTLENGYFLSRNKENHSQPTQSSLEDSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVMVALGLLTVILMSLLLYQRTLC----CGS----KGFMCSQ-------
TNLINSSETSDFAWIGMKTKTSTQ-TSTPFTNFD--SESPIDGCAVVDSKGVWSIRSCIQ
                                                                                                 NSFFSTDEEFPTQLQNFEGRTQTEIRTLREKVERLEKLVEGLQSILMKEWNVTE----SG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TPTKAVKTTGVLSSPCPPNWIIYEKSCYLFSMSLNSWDGSKRQCWQLGSNLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----CSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLL
                                                                                                                                                                                                   189
189 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel. 28, () (TrEMBLrel. 28, )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               189 AA;
                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                   189
21805 MW; 48F6021C793C4845 CRC64;
                                                                                                                                                                                                                                                     TYPE_LECTIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21065 MW;
                                                                                                                                                             8.3%;
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                                                                                                                                                 30;
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Last
                                                                                                                                                 Score 85.5; DB
Pred. No. 4.5;
30; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Fragment)
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Andame M.D., Celniker S.B., Holt R.A., Evane C.A., Galle R.F., RA Adame M.D., Celniker S.B., Holt R.A., Evane C.A., Goalyne J.D., RA Adame M.D., Celniker S.B., Holt R.A., Evane C.A., Goalle R.F., RA Amanatides P.G., Scherer S.B., Holt R.A., Evane C.A., Galle R.F., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA George R.C., Royallon C.R., Miklos G.L.G., RA Barladon R.C., Rogers Y.H.C., Blazej R.G., Champe M., Pfeiffer B.D., RA Barladon R.C., Royallon C.R., Miklos G.L.G., RA Barladon R.C., Baxter B.G., Helt G., Nelson C.R., Miklos G.L.G., RA Barlak K.C., Bavari A., An H.-J., Andrews-Pfannkoch C., Baldwin D., Ra Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Ra Glore K.J., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., Ra Burtis K.C., Busam D.A., Butler H., Cadleu B., Center A., Chandra I., Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., RA George R., Correll J.H., Gu Z., Mays A.D., Dew I., Dietz S.M., RA George R.C., Perraz C., Ferriera S., Fleischmann W., Roller C., Gabrieltan A.E., Garg N.S., Gelbart W.M., Glasser K., RA Hortin D., Houston K.A., Heiman T.J., Hernandez J.R., Houck J., Albert M., Glasser K., RA Hortin D., Houston K.A., Howland T.J., Wei M.-H., Diegwam C., RA Hortin D., Houston K.A., Howland T.J., Wei M.-H., Diegwam C., RA Lisko P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., Li J.H., Li Z., Liang Y., Lin X., Liako P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X., RA Hortin D., Mcharet B., Wandar S., Pan K., Woshrefi A., Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Ra Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A., Ra Hallad R., Wang S.-Y., Wang S.-Y., Wassarman D.A., Weinsenbach J., RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Palazzolo M., Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
Q9W3D8
  LT 14
D8 DROME
Q9W3D8_I
melanogaster
Genome Biol.
[3]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygo:
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CG12111-PA (AT17652p).
ORFNames=CG12111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000
10-MAY-2005
                   Celliker S.E., Wheeler D.A., Kronmiller B., Carlson J.W., Halpern A Patel S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A., Peter S., Adams M., Champe M., Dugan S.P., Frise E., Hodgson A., Pacel S., Hoskins R.A., Laverty T., Muzny D.M., Nelson C.R., Pacel D.J.M., Park S., Pfeliffer B.D., Richards S., Sodergren E.J., Svirskas R., Tabor P.E., Wan K., Stapleton M., Sutton G.G., Venter Weinstock G., Scherer S.E., Myers E.W., Glbbs R.A., Rubin G.M., "Finishing a whole-genome shotgun: release 3 of the Drosophila melanogaster euchromatic genome sequence.";
Genome Biol. 3:RESEARCH0079-RESEARCH0079(2002).
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NCBI_TaxID=7227
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                                                                                                                                                                                        MEDLINE=22426065; PubMed=12537568; Celniker S.E., Wheeler D.A., Kronm
                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE
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30,
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Matches 28
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Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S. Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochnik S.E Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A., Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q., Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                EMBL;
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Patel S., Phouanenavong S.,
                                                                                                                                                                                                                                                                                                                                                                Champe M., Chavez C., Dorsett V., Dresnek D., Farfan D., Frise E.,
George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G.,
Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kaminker J.S., Bergman C.M., Kronmiller B., Ca
Patel S., Frise E., Wheeler D.A., Lewis S.E.,
Ashburner M., Celniker S.E.,
"The transposable elements of the Drosophila m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Drosophila melanogaster release Submitted (MAR-2000) to the EMBL/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berkeley Drosophila Genome Project;
Celniker S., Carlson J., Wan K., Pfeiffer
Hoskins R., Stapleton M., Pacleb J., Park
                                                                                                                                                                                                                                                                                                                             Submitted (DEC-2001) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                         Celniker S.;
                                                                                                                                                                                                                                                                                                                                                                                                       Stapleton M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  systematic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Annotation of the Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=22426070; PubMed=12537573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                                                                     FlyBase; FBgn0030050; CG12111.
GO; GO:0005529; F:sugar binding;
                                                                                                                                                                                                                                                                                           HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FlyBase
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SMART; SM00034; CLECT;
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                      173
                                              108
                                                                                                                                                                                                                                                                            P35247; 1B08.
bl; CG12111; Drosophila melanogaster.
                                                                                                                                                                                                                                                                                                     AE003444; AAF46391.1; -;
AY070795; AAL48417.1; -;
163
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                                                                                                                                            28;
                                                                                                                                                         Similarity
                                                                                                                  WMRNGSHCYYFS-MEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYV-----GEDFY
                                                                                                                                                                                           PS50041; C_TYPE_LECTIN
188 AA; 21771 MW; 8
                                                                     WIGLRDI--DG---WR----
                      SSCEVALQWICEKVLP
                                              WISGNDLGTEGAFYWMSNGRPMTYAPW-NGPKQMPDNYGGN-
                                                                                               FVRIGDNYYYIEPMNKVNWFQAAGACRMMNAHLASIEDKPEMEALIKYMKAKGFKNNDYF
                                                                                                                                                                                                                                         IPR001304; Lectin_C.
 ANCKIOMLYVCEATER
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                                                                                                                                             Conservative
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Pred. No. 42;
27; Mismatches
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018202;
01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein Y4881B.9.
ORFNames-Y4881B.9;
Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
NCBI TaxID=6239;
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                          2006, 15:35:29
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73;
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Maximum Match 100%
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                                                                                   seq length: 188
seq length: 189
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2: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Copyright (c) 1993 - 2006 Compugen Ltd.
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US-08-722-126A-5
PCT-US95-04258-5
US-09-270-767-31816
US-09-270-767-47033
US-09-198-452A-1169
US-09-438-185A-761
US-09-438-185A-761
US-08-469-427A-5
US-08-609-443B-5
US-08-609-443B-5
US-08-851-896-5
US-08-851-896-5
US-09-107-433-5087
US-09-107-433-5087
US-09-108-452A-135
US-09-18-452A-135
US-09-18-452A-135
US-09-18-452A-135
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US-09-18-452A-135
US-09-18-452A-136
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US-09-18-452A-138-5
US-09-18-452A-14285
US-09-18-273-107
US-09-28-770-767-58978
US-09-270-767-58978
US-09-605-703B-1580
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Sequence 761, Appli
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14285, A
14285, A
14285, A
1885, A
35780, A
58978, A
1580, Ap
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Query Match Best Local Similarity	US-08-722-126A-5 Sequence 5, Application US/08722126 Patent No. 6034227 GENERAL INFORMATION: APPLICANT: BECHT, Israel APPLICANT: GUTHMANN, MATCELO D. APPLICANT: TAL, Michael APPLICANT: TAL, Michael APPLICANT: GUTHMANN, MATCELO D. APPLICANT: TAL, Michael APPLICANT: GUTHMANN, MATCELO D. APPLICANT: TAL, Michael TITLE OF INVENTION: FUNCTION-AS NUMBER OF SEQUENCES: 20 CORRESPONDENCE ADDRESS: ADDRESSEE: BROWDY AND NEIMARK STATE: D.C. COUNTRY: UNITED STATES OF AME ZIP: 20004 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: MEDIUM TYPE: BAPLICATION DATA: OPERATING SYSTEM: PC-DOS/MS-D SOFTWARE: DATE: 08-OCT-1996 CLASSIFICATION NUMBER: US/08/722 FILING DATE: 08-OCT-1996 CLASSIFICATION NUMBER: US/08/722 FILING DATE: 08-APR-1995 FILING DATE: 08-OCT 1996 CLASSIFICATION UNMBER: 23,618 FOR OWN DATE: 08-O	28 43 4.2 29 42.5 4.1 31 42.5 4.1 32 42.5 4.1 33 42 42 4.1 34 42 4.1 36 42 4.1 37 42 4.1 38 42 4.1 39 41.5 4.0
100.0%; Score 1036; DB 2; Le 100.0%; Pred. No. 4.8e-105;	A SOCIATED ANTIGEN SOCIATED ANTIGEN W., Ste. 300 RICA RICA 7,126A 04258	188 2 US-09-134-000C-3652 188 2 US-09-393-627B-19 188 2 US-09-438-165A-957 189 2 US-09-902-540-10384 188 2 US-09-958-089-14 188 2 US-09-558-089-14 188 2 US-09-558-087-14 188 2 US-09-558-087-14 189 2 US-09-558-0796A-20257 189 2 US-09-248-796A-20257 189 1 US-09-489-039A-11196 189 1 US-08-142-449B-14 189 1 US-08-142-449B-14 189 1 US-08-69-758-1 189 1 US-08-69-758-1 188 1 US-08-69-487-79-1 188 1 US-08-69-487-71 188 1 US-08-69-63C-11 188 1 US-08-69-063C-11
Length 188;	(MAFA)	Sequence 3652, Apl Sequence 19, Appl Sequence 957, App Sequence 10384, Appl Sequence 14, Appl Sequence 14, Appl Sequence 14, Appl Sequence 14, Appl Sequence 11, Appl Sequence 11, Appl Sequence 17, Appl Sequence 17, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 11, Appl

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Best Local Similarity
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                                                                                                                Matches 188;
                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: IL 109257
FILING DATE: 08-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: BROWDY, ROGER L.
REGISTRATION NUMBER: 25,618
REFERENCE/DOCKET NUMBER: PECH
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                                                 TELEX: 248633
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: A DNA MOLECULE E
TITLE OF INVENTION: FUNCTION-ASSOCIA
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W.,
                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/I
FILING DATE: 06-APR-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Washington
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                  CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
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CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
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                                                                                                                Score 1036; DB 4;
Pred. No. 4.8e-105;
; Mismatches 0;
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Sequence 47033, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 47033
LENGTH: 189
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                                                                                                                                                                                                                           ; TYPE: PRT ; ORGANISM: Drosophila melanogaster US-09-270-767-47033
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TYPE: PRT
; ORGANISM: Drosophila melanogaster
US-09-270-767-31816
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APPLICANT: Homburger et al.
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT FILLING DATE: 199-03-17
CURRENT FILLING DATE: 199-03-17
NUMBER OF SEQ ID NOS: 62517
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 31816, Application US/09270767 Patent No. 6703491
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                                                                                                                                                                                      Query Match
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5.2%; Score 54; DB 2;
Local Similarity 21.2%; Pred. No. 6.8e+02;
hes 18; Conservative 10; Mismatches 3;
                                                                                                                                                                      Local
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121 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQ 180
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160 RDICDDNGTIMCPQCDRSCDYWRLN 184
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                                                                                                                                                  l Similarity
18; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RTLCCGSKGFMCSQCSRCPNLWMRN 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SRWK-----VKAVLHRPCVSYLVMVALGLLTVILMSLLLY-----
                                   RTLCCGSKGFMCSQCSRCPNLWMRN 82
                                                                       SKWKNLQPLDQIKDYFGAKVALYFAW--LGFYTQMLIPISVFGVLCFLYGFITWNSDPIS 159
                                                                                                            SRWK-----VKAVLHRPCVSYLVMVALGLLTVILMSLLLY-----
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ilarity 21.2%;
Conservative 1
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                                                                                                                                                  Score 54; DB 2;
Pred. No. 6.8e+02;
0; Mismatches 31
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                                                                                                                                                                                                                                                                                                                                                                                                                       of Drosophila melanogaster
                                                                                                                                                                                      Length 189;
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RESULT 5 US-09-198-452A-1169

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APPLICANT: Kalman, Sue
APPLICANT: Davis, Ronald
APPLICANT: Davis, Ronald
APPLICANT: The Regents of the University of California
APPLICANT: The Regents of the Prevention of California
TITLE OF INVENTION: Chlamydia Pneumoniae Genome Sequence
FILE REFERENCE: 018941-000411US
CURRENT APPLICATION NUMBER: US/09/438,185A
CURRENT FILING DATE: 2002-03-13
PRIOR APPLICATION NUMBER: US 60/108,279
PRIOR FILING DATE: 1998-11-12
PRIOR APPLICATION NUMBER: US 60/128,606
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NO 761
SEQ ID NO 761
SEQ ID NO 761
LENGTH: 188
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US-09-438-185A-761
RESULT 7
US-09-270-767-42805
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SEQ ID NO 1169
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Patent No. 6559294
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GENERAL INFORMATION:
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Best Local S
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Stephens, Richard APPLICANT: Mitchell, Wayne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Chlamydia pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Chlamydia pneumoniae
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             y Match 5.2%; Score 53.5; DB 2;
Local Similarity 33.3%; Pred. No. 7.7e+02;
heB 22; Conservative 10; Mismatches 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 PIHPRDKWKYRFEVLQAVIEILGLGVLILVFDIIGCFLAFLVAIILSLLLY-----CNST 164
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                                                                                                                             126 VGEDFYWIGLRDIDGW 141
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                                                                                                                                                                                                                FSMEKRD-----WNSSLK-----FCADKGSHLLTFPDNQGVNLF-----QEY 125
                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                            4.9%;
27.6%;
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Pred. No. 1.6e+03;
9; Mismatches 21;
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OCHMARE: PATENTIAN
SOFTWARE: PATENTIAN
CURRENT APPLICATION NUMBER: US/08/469,427A
FILING DATE: 06-JUN-1995
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION UMBER: US 08/397,651
FILING DATE: 01-MAR-1995
FILING DATE: 01-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Evans, Joseph D
REGISTRATION NUMBER: 26,269
REGISTRATION NUMBER: 41979cp2
TELEPHONE: (202) 628-8800
TELEPHONE: (202) 628-8800
TELEPHONE: (202) 628-8804
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TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 42805
LENGTH: 188
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GENERAL INFORMATION:
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APPLICANT: Eriksso:
APPLICANT: Olofsso:
APPLICANT: Alitalo
APPLICANT: Pajusol
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Best Local
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ORGANISM: Drosophila melanogaster
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                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B AND TITLE OF INVENTION: DNA CODING THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                 STATE: LC
STATE: 20005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70 SQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCA----DKGSHLLTFPDNQGVNLFQE 124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 RVQDD-----SRWKVKAVLHRPCVSYLVMVALGLLTVI-LMSLLLYQRTLCCGSKGFMC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: Evenson, McKeown, Edwards & Lenahan
1200 G Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.8%; Score 50; DB 2; ilarity 21.3%; Pred. No. 1.8e+03; Conservative 16; Mismatches 48
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Alitalo, Kari
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                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
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RESULT 9
US-08-609-443B-5
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                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/397,651
FILING DATE: 01-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/469,427
FILING DATE: 06-JUN-1995
PRIOR APPLICATION NUMBER: US 08/569,063
APPLICATION NUMBER: US 08/569,063
                                                                                                                                   TELEPHONE: (202) 628-8800
TELEFAX: (202) 628-8844
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
TISSUE TYPE: adult mouse heart
                                                                                                                                                                        NAME: EVANS, JOSEPH D
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 100
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 628-8800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: ALITALO, Kari
APPLICANT: PAJUSOLA, Katri
TITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B AND
TITLE OF INVENTION: DNA CODING THEREFOR
NUMBER OF SEQUENCES: 57
MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/609,443B
FILING DATE: 01-MAR-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acid
                                                                                                                                                                                                                                                                       FILING DATE: 06-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                   TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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Local Similarity 41.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56 LSMELMGNVVKQLVPSCVTVQRCG 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08609443B
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ALITALO, Kari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ERIKSSON, Ulf
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Pred. No. 3.5e+03;
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US-08-569-063C-5
                                                                                                                                                       US-08-569-063C-5
                                                                                                                                                                                                                                                                                        TELEFAX: (202) ...
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
FRIGTH: 188 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.6%;
Best Local Similarity 41.7%;
Matches 10; Conservative
                                                                            Matches
                                                                                            Query Match 4.6%; Score 47.5; DB 1 Best Local Similarity 41.7%; Pred. No. 3.5e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Rolesse #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,063C
FILING DATE: 06-DEC-1995
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 08/469,427
FILING DATE: 06-UN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Applic Patent No. 5928939
                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 01-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: EVANS, JOSEPH D
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 1064
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 628-8800
TELEPHONE: (202) 628-8844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                       MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
TISSUE TYPE: adult mouse heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: ERIKSSON, Ulf
APPLICANT: OLOFSSON, Birgitta
APPLICANT: ALITALO, Kari
APPLICANT: PAJUSOLA, Katri
TITLE OF INVENTION: VASCULAR ENDOTHELIAI
TITLE OF INVENTION: DAA CODING THEREFOR
NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                        TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Evenson, McKeown, Edwards & Lenahan, P.L.L.C
STREET: 1200 G Street, N.W., Suite 700
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                                    149 LSLSILSNSV---VQKCGTIHRCG 169
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56 LSMELMGNVVKQLVPSCVTVQRCG 79
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                                                                          Conservative
                                                                                                                                                                                                                                                        linear
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Pred. No. 3.5e+03;
4; Mismatches 7
                                                                            4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 1064/41979CP3
                                                                                                              DB 1;
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                                                                                                                Length 188;
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RESULT 11 US-08-851-896-5

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RESULT 12
US-09-252-991A-29925
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FILING DATE: 06-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: EVANS, JOSEPH D
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 1064/41979CP4
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                      Sequence 29925, Application US/09252991A Patent No. 6551795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
       APPLICANT:
                                                                                                                                                                                                              Best Local Similarity Matches 10; Conserv
                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: ERIKSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (202) 628-8844
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
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ORIGINAL SOURCE:
TISSUE TYPE: E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 01-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NIMBER: US 08/397,651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/851,896
FILING DATE: 06-MAY-1997
PRIOR APPLICATION UNBER: US/08/609,443B
FILING DATE: 01-MAR-1996
PRIOR APPLICATION UNBER: US/08/609,443B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B AND TITLE OF INVENTION: DNA CODING THEREFOR NUMBER OF SEQUENCES: 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
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CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
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INFORMATION:
NT: Marc J. Rubenfield et al.
                                                                                                                                                                              149 LSLSILSNSV----VQKCGTIHRCG 169
                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
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                                                                                                                                           LSMELMGNVVKQLVPSCVTVQRCG
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ALITALO, Kari
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                                                                                                                                                                                                                4; Mismatches
                                                                                                                                                                                                                                 Score 47.5; DB 2;
Pred. No. 3.5e+03;
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                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                   Length 188;
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FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR PILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 29925
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US-09-107-433-5087
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 5087, Application US/09107433
Patent No. 6800744
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 188
TYPE: PRT
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                                                                                          INFORMATION FOR SEQ ID NO: 5087:
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                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/ 085131
FILING DATE: May 12, 1998
APPLICATION NUMBER: 60/051553
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: <Unknown>
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,433
                                                                                                                                                      NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-011
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 5206
                                           SEQUENCE CHARACTERISTICS:
LENGTH: 188 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         156 VSD-----AGQWI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126 VGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQWI 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 RNGSHCYYFSMEKRDWNSSLKFC-----ADK---GSHLLTFPDNQGVNLFQEY 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96 RNASHVRLFQLSEDDSDQDIVFAVGWSDGVGVSPSADQDSNGDWDFDLPPTRTWFVFRGY 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: <Unknown>
OPERATING SYSTEM: <Unknown>
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Waltham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                 TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: CD/ROM ISO9660
                                                                                                          TELEFAX: (781)893-8277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ON: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS (ON: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS 107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%;
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Pred. No. 3.
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MOLECULE TYPE: protein HYPOTHETICAL: YES

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US-09-543-681A-7232
; Sequence 7232, Application US/09543681A
; Patent No. 6605709
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; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-135
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; ORGANISM: Proteus mirabilis
US-09-543-681A-7232
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                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
                                    PATCHL NO. 6605709

PATCHL NO. 6605709

GENERAL INFORMATION:
APPLICANT: GARY BRETON
APPLICANT: GARY BRETON
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.1002-001
CURRENT APPLICATION NUMBER: US/09/543,681A
CURRENT FILING DATE: 1000-04-05
PRIOR APPLICATION NUMBER: US 60/128,706
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344

TYPE: PRT
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Best Local S
Matches 22
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CURRENT FILING DATE: 1998-11-24
NUMBER OF SEQ ID NOS: 6849
SEQ ID NO 135
LENGTH: 189
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GENERAL INFORMATION:
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, frag
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis,
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Griffais,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 4.6%; Score 47.5; DB 2; Local Similarity 22.2%; Pred. No. 3.5e+03; les 22; Conservative 11; Mismatches 41;
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ORGANISM: Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88 YFSMEKRDWNSSL-----KFC-----ADKGSHLLTFPDNQ------GVNLFQEY 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EDFCYLLRRWELFGGKLIEKQADEHAVWALAQDLDGHAW 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AKNFYCKVFGLDAMSCENKFCLPHEGKTIFWLRE-----VQAEKKNIVTLSLSLDCACE
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23.5%; Pred. No. 3.5e+03;
ative 13; Mismatches 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26;
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Search completed: January 9, 2006, 15:38:01 Job time : 26.2885 secs

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Run

92:

Sequence:

Minimum DB Maximum DB

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Scoring table:
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Perfect score:
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Maximum Match
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                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 188
seq length: 189
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Gapop 10.0 , Gapext 0.5
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1036
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  Match
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
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Listing first 45 summaries
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Copyright (c) 1993 - 2006 Compugen Ltd.
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 В
US-09-811-3678-5
US-09-811-3678-3
US-10-207-655-196
US-10-207-655-196
US-10-207-811-3678-1
US-09-759-130-83
US-10-287-436A-1251
US-09-764-1790-83
US-10-287-436A-1251
US-09-764-870-487
US-10-125-540-487
US-10-125-540-487
US-11-097-143-3261
US-10-144-893-48
US-10-425-14-893-48
US-10-425-135-2622
US-10-425-115-242970
US-10-425-115-242970
US-10-425-115-242970
US-10-425-116-909
US-10-425-116-909
US-10-425-116-909
US-10-425-116-909
US-10-425-115-308045
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Sequence 5, Appli
Sequence 3, Appli
Sequence 196, App
Sequence 1, Appli
Sequence 83, Appl
Sequence 83, Appl
Sequence 83, Appl
Sequence 487, App
Sequence 487, App
Sequence 2490, Ap
Sequence 3261, App
Sequence 50285,
Sequence 50285,
Sequence 5642, Appl
Sequence 5642, Appl
Sequence 202199,
Sequence 202199,
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Sequence 202199,
Sequence 1876, Appl
Sequence 242970,
Sequence 46, Appl
Sequence 47259, Aps
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US-09-811-367B-5
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US-09-811-367B-5
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              Sequence 3, Application US/09811367B Patent No. US20020155110A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                            Matches 188;
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Best Local (
    APPLICANT: GEMINI SCIENCE,
                                                                                                                                                                                                                                                                                                     Local
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                                                                                                                 181 WICEKVLP 188
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Result

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US-10-948-736-5	US-10-425-115-291425	US-10-673-708-18	US-10-415-247-5	US-09-961-756-5	US-09-907-007-18	US-09-349-954A-18	US-10-732-923-8040	US-10-846-374B-184	US-10-425-115-345243	US-10-425-115-315785	US-10-767-701-39241	US-10-425-115-236658	US-10-767-701-51364	US-10-425-115-216727	US-10-425-114-50994	US-10-425-115-254869	US-10-424-599-184040
Sequence		Sequence	Sequence	Sequence	Sequence	Sequence	Sequence						Sequence	Sequence	Sequence	Sequence	Sequence
5, Appii	291425,	18, Appi		5, Appli	18, Appi	18, Appi		184, App		315/85,	39241, A	-	51364, A	216727,	50994, A	-	184040,

ALIGNMENTS

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APPLICANT: GEMINI SCIENCE, INC.

APPLICANT: Takahashi, No. US20020155110Aluaki
APPLICANT: Takahashi, No. US20020155110Aluaki
APPLICANT: Takahashi, No. US20020155110Aluaki
APPLICANT: Mikayama, Toshifumi
TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USERIES OF INVENTION NUMBER: US/09/811,367B
CURRENT APPLICATION NUMBER: US/09/811,367B
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR FILING DATE: 2000-03-17
NUMBER OF SEQ ID NOS: 20
SOPTWARE: Patentin version 3.0
SEQ ID NO 5
LENGTH: 188
TYPE: PRT
                                                                                                                                                                                           LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQ
                           LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQ 180
                                                                                                CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
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TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USING THEM
FILE REFERENCE: 021286/0278719
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR FILING DATE: 2000-03-17
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin version 3.0
SEQ ID NO 30
SEQ ID NO 30
                                                                                                                                                                                                                                                                                                                                                 SOPTWARE: PatentIn version 3.0
SEQ ID NO 196
LENGTH: 189
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 196, Application US/10207655 Publication No. US20030118592A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 151;
                                                                                                                                                                                                                                                Matches 103; Conservative
                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Hayden-Ledbetter, Martha S.
TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
FILE REFERENCE: 390069.401C1
CURRENT FILING DATE: 2002-07-25
CURRENT FILING DATE: 2002-07-25
CURRENT FILING DATE: 2002-07-25
CURRENT FILING DATE: 2002-07-25
CURRENT FILING DATE: 2002-07-25
CURRENT FILING DATE: 2002-07-25
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                                      121 LFQEYVGEDFYWIGLRDIDGWRWEDGPALSLS-ILSNSVVQKCGTIHRCGLHASSCEVAL 179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN 120
  LLQVFLSEAFCWIGLRNNSGWRWEDGSPLNFSRISSNSFVQTCGAINKNGLQASSCEVPL
                                                                               CQGSNYSTCASCPSCPDRWMKYGNHCYYFSVBEKDWNSSLBFCLARDSHLLVITDNQBMS
                                                                                                                        CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN
                                                                                                                                                               MTDSVTYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVATALGLLTAVLLSVLLYQWIL
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Mikayama, Toshifumi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                 52.7%; Score 545.5; DB 4
55.1%; Pred. No. 8.7e-47;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                              28; Mismatches
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                                                                              US-09-811-367B-1
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; ORGANISM: Homo Sapiens
US-10-756-149-5210
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APPLICANT: Ziotnik, Albert
APPLICANT: Ziotnik, Albert
TITLE OF INVENTION: MOTHODS OF DIAGNOSIS OF METASTATIC CANCER, COMPOSITIONS AND
TITLE OF INVENTION: METHODS OF SCREENING FOR MODULATORS OF METASTATIC CANCER
FILE REFERENCE: file
CURRENT APPLICATION NUMBER: US/10/756,149
CURRENT FILING DATE: 2004-01-12
NUMBER OF SEQ ID NOS: 5818
SOFTWARB: PATENTIN VERSION 3.2
SEQ ID NO 5210
LENGTH: 189
TYPE: DET
                Query Match
Best Local Similarity
                                                                                                                                                            SOFTWARE: PatentIn version 3.0 SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09811367B
Patent No. US20020155110A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5210, Application US/10756149 Publication No. US20050181375A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 103; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Matches 100;
                                                                                                                                                                                                                 APPLICANT: GEMINI SCIENCE, INC.
APPLICANT: Takahashi, No. US20020155110A1Uaki
APPLICANT: Mikayama, Toshifumi
TITLE OF INVENTION: SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA)
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND PILE REFERENCE: 021286/0278719
CURRENT FILLINGTION NUMBER: US/09/811,367B
CURRENT FILLING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/190,716
PRIOR FILING DATE: 2000-03-17
                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 20
                                                                                             TYPE: PRT
ORGANISM: Homo
                                                                                                                                       LENGTH: 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 52.7%; Score 545.5; DB 5; Local Similarity 55.1%; Pred. No. 8.7e-47;
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Conservative
                                                                                                 sapiens
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                50.7%; Score 525.5; DB 3
29;
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  Mismatches
                                   DB 3;
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US-09-759-130B-83
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CURRENT FILING DATE: 2002-09-16
PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR EILING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR FILING DATE: 2000-04-27
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR FILING DATE: 2000-05-24
PRIOR FILING DATE: 2000-05-24
                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-759-130B-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 83, Application US/09759130B Publication No. US20030022279A1
                                                                                                                                                                                       SOFTWARE: FastSEQ
SEQ ID NO 83
                                     Query Match
Best Local Similarity
Matches 47; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 09/333,159
PRIOR FILING DATE: 1999-06-14
PRIOR APPLICATION NUMBER: US 09/596,194
PRIOR FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: US 09/342,364
PRIOR FILING DATE: 1999-06-29
PRIOR FILING DATE: 1999-06-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE
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TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
TITLE OF INVENTION: USES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: US 09/420,707
PRIOR FILING DATE: 1999-10-19
                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-06-30 PRIOR APPLICATION NUMBER: US 09/393,996
                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/608,452 PRIOR FILING DATE: 2000-06-30
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                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE: MPI00-5350MNIM
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 09/602,871
                                                                                                                                                                                                                                                                                                                            FILING DATE: 1999-09-10
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Sharp, John D
Barnes, Thomas S
Kirst, Susan J
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Myers, Paul S
Leiby, Kevin R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wrighton, Nicolas
doodearl, Andrew
                                         Conservative
                                                                                                                                                                                                            for Windows Version 4
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                                                         15.4%;
                                         31;
                                                         Score 159.5; DB 3
Pred. No. 8.6e-08;
                                         Mismatches
   --YQRTLCCGS--
                                                                            DB 3;
                                                                            Length
                                           Indels
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                                                                                188;
                                         41;
       -KGFMCS 70
                                           Gaps
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APPLICANT: HOLIZMAN, DOUGLAS A
APPLICANT: HOLIZMAN, DOUGLAS A
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: USES.
TITLE OF INVENTION: USES.
FILE REFERENCE: MPIOO-5350MNIM
CURRENT APPLICATION NUMBER: US/10/741,790
CURRENT APPLICATION NUMBER: US/479,249
PRIOR APPLICATION NUMBER: US 09/479,249
PRIOR FILING DATE: 2000-01-07
PRIOR FILING DATE: 2000-01-07
PRIOR FILING DATE: 2000-01-07
PRIOR APPLICATION NUMBER: US 09/559,497
PRIOR APPLICATION NUMBER: US 09/559,63
PRIOR APPLICATION NUMBER: US 09/578,063
PRIOR FILLING DATE: 1909-06-14
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
PRIOR APPLICATION NUMBER: US 09/33,159
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                                                                                                                                                   ; ORGANISM: Homo sapiens
US-10-741-790-83
                                                              Query Match
Best Local S
Matches 47
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                                                                                                                                                                                                             SOFTWARE: FASTSEQ for Windows
SEQ ID NO 83
LENGTH: 188
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                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: US 09/602,871
PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: US 09/420,707
PRIOR FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 460
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 09/342,364
FILING DATE: 1999-06-29
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EKYFIGLIYHREEKRWRWINNSVFNGNVTNONQNFNCATI---GLTKTFDAASCDISYRR 181
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Fraser, Christopher C
Sharp, John D
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Leiby, Kevin R
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Kirst, Susan J
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                                                                Conservative
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                                                                15.4%; Score 159.5; DB 4; 25.5%; Pred. No. 8.6e-08; tive 31; Mismatches 65;
                                                                                                                                                                                                                                                                 Version
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                                                                                                           Length 188;
                                                                       Indels 41;
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Sequence 1251, Application US/10287436A
Publication No. US2005020421A1
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TREJ
TITLE OF INVENTION: REBUNATIOD ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
PRIOR APPLICATION NUMBER: US 60/336,220
PRIOR FILING DATE: 2001-10-31
NUMBER OF SEQ ID NOS: 1446
SOFTWARE: FASESEQ for Windows Version 4.0
SEQ ID NO 1251
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US-10-287-436A-1251
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US-10-287-436A-69
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Publication No. US20050202421A1
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TREATMENT
TITLE OF INVENTION: RHEUMATOID ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
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PRIOR FILING DATE: 2001-10-31
NUMBER OF SEQ ID NOS: 1446
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 69
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ORGANISM: Homo sapiens
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25.5%; Pred. No. 8.6e-08;
1tive 31; Mismatches 65
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                                                                                                                                                                                       AND TREATMENT
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US-10-125-540-487
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US-09-764-870-487
; Sequence 487, Application US/09764870
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US-10-287-436A-1251
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 487
LENGTH: 189
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Best Local Similarity
Matches 47; Conserv
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GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and
FILE REFERENCE: PTZ14
                                                            GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ14C1
                                                                                                                                           Sequence 487, Application US/10125540 Publication No. US20030059875A1
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                      CURRENT APPLICATION NUMBER: US/10/125,540 CURRENT FILING DATE: 2002-04-19
      Prior Application removed - See File Wrapper or Palm
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Local Similarity 27.2%;
es 34; Conservarion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64 SKGFMCSQC-SRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVNLF 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71 QC--SRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGE 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 MIISGLIVVVLKVVGMTLFLLYFPQIFNKSNDGFTTTRSYGTVSQIFGSSSPSPNGFITT 64
                                                                                                                                                                                                                                                                                                                                                   FKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTECLMTRPW
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ilarity 25.5%;
Conservative 3
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Pred. No. 8.6e-08;
1; Mismatches 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 153.5; DB 3
Pred. No. 3.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61;
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122

181

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NUMBER OF SEQ ID NOS: 646
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 487
; LENGTH: 189
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-125-540-487
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US-11-097-143-5490
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Best Local S
Matches 40
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Best Local Similarity 27.2%; Pred. No. 3.5e-07;
Matches 34; Conservative 25; Mismatches 61
                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version SEQ ID NO 5490 LENGTH: 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5490, Application US/11097143 Publication No. US20050208558A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/11/097,143
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: 60/157,832
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: 60/160,191
PRIOR APPLICATION NUMBER: 60/160,191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Venter, J. Craig
APPLICANT: et al.
TITLE OF INVENTION: DETECTION KIT, SUCH AS
TITLE OF INVENTION: ARRAYS, FOR DETECTING
TITLE OF INVENTION: DROSOPHILA GENES.
FILE REFERENCE: CLOO728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-11-12
PRIOR APPLICATION NUMBER: 60/173,383
PRIOR FILING DATE: 1999-12-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR FILING DATE: 1999-10-28
                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/191,637 PRIOR FILING DATE: 2000-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: 60/184,831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/164,769
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2000-02-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/175,693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182 VCSKM 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182 ICEKV 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123 FKFTRRE-PWIGLRRVGDEFHWVNGDPFDPDTFTIAGPGECVFVEPTRLVSTECLMTRPW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123 QEYVGEDFYWIGLRDI-DGWRWEDGPALSLSILSNSVVQKCGTIHRCGLHASSCEVALQW 181
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6
                                                                                                                          37 YLVMVALGLLTVILMSLLLYQRTLCCGSKG-FMCSQCSRC-----PNLW-----MRNGS
                                                                                 4
                                                                                                                                                                       40;
                                                                                                                                                                                             Similarity
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KRYYLGIFFKANWFKATQYCRYHGMHLASISSQEENDRLEKHIRDFGLGHEHFWISGTDL 119
                                      HCYYFSM-EKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYV-----GEDFYWIGLRDI 138
                                                                                   YLILSVI----ISLOLLCLLDRTMATPPKGPGPVADCPNCVDESQYTPNKWTMPLLKLGE
                                                                                                                                                                       Conservative
                                                                                                                                                                    8.9%; Score 92.5; Di
20.8%; Pred. No. 0.5;
tive 29; Mismatches
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EXPRESSION OF 10,000 OR MORE
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                                                                                                                                                                                                               Length 188;
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                                                                                     59
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RESULT 14 US-10-114-893-48

Sequence 48, Application US/10114893 Publication No. US20020193567A1

GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
APPLICANT: MCCOy, John M.
APPLICANT: LaVallie, Edward R.
APPLICANT: Collins-Racie, Lisa A.

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US-11-097-143-3261
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PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: 60/175,693
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: 60/184,831
PRIOR FILING DATE: 2000-02-24
PRIOR FILING DATE: 2000-03-23
PRIOR FILING DATE: 2000-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: 60/160,191
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: 60/161,932
PRIOR FILING DATE: 1999-10-28
PRIOR APPLICATION NUMBER: 60/164,769
PRIOR FILING DATE: 1999-11-12
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                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ
SEQ ID NO 3261
                                                                                                                                                                                                                                                         Query Match 7.3%; Score 75.5; D
Best Local Similarity 20.6%; Pred. No. 26;
Matches 28; Conservative 27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Venter, J. Craig APPLICANT: et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/11/097,143
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: 60/157,832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: DETECTION KIT, SUCH AS TITLE OF INVENTION: ARRAYS, FOR DETECTING TITLE OF INVENTION: DROSOPHILA GENES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: CL000728
                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: DROSOPHILA
                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
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163 ANCKIOMLYVCEATEP
                                          173 SSCEVALQWICEKVLP 188
                                                                                    108 WISGNDLGTEGAFYWMSNGRPMTYAPW-NGPKQMPDNYGGN--ENC--VHMFATREMIND
                                                                                                                            132 WIGLRDI--DG---WR-----WEDGPALSLSILSNSVVQKCGTIH----RCGLHA 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3261, Application US/11097143
                                                                                                                                                                      48 FVRIGDNYYYIEPMNKVNWFQAAGACRMMNAHLASIEDKPEMEALIKYMKAKGFKNNDYF
                                                                                                                                                                                                              79 WMRNGSHCYYFS-MEKRDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYV-----GEDFY 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADEGNFFWMATGRPITFTNWNAGE----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      --DG---W----RWEDGPALSLSILSNSVVQKCGTIHRC---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          for Windows Version
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EXPRESSION OF 10,000 OR MORE
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                                                                                                                                                                                                                                                             Gaps
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APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5323)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 250285
LENGTH: 188
TYPE: PRT
ORGANISM: Glycine max
PEATURE:
ORGANISM: Glycine max
PEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT3847_68035C.1.pep
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APPLICANT: Treacy, Maurice
APPLICANT: Treacy, Maurice
APPLICANT: Bowman, Michael R.
APPLICANT: Spaulding, Vikki
APPLICANT: Spaulding, Vikki
APPLICANT: Carlin-Duckett, McKeough
APPLICANT: Kelleher, Kerry S.
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
FILE REFERENCE: GI 6000-10A
CURRENT APPLICATION NUMBER: US/10/114,893
CURRENT FILING DATE: 2002-04-02
EARLIER APPLICATION NUMBER: 09/413,232
EARLIER FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 321
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 48
LENGTH: 189
TYPE: PRT
ORGANISM: Homo sapiens
US-10-114-893-48
Search completed: January 9, 2006, 15:56:00 Job time : 73.5381 secs
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US-10-424-599-250285
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                                                                                                                                                                                                                                                                                                                               Query Match 6.1%; Score 63.5; DB 4; Length 188; Best Local Similarity 24.5%; Pred. No. 4.3e+02; Matches 26; Conservative 15; Mismatches 36; Indels 29; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 7.3%; Score 75.5; DB 4; Length 189; Best Local Similarity 34.9%; Pred. No. 26; Matches 15; Conservative 7; Mismatches 20; Indels
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                                                                                                                146
                                                                                                                                                                       120 --NLFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSILSNSVVQKCG 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138 ANCSAPCPODWIWHGENCYLFSSGSFNWEKSOEKCLSLDAKLL 180
                                                                                                                                                                                                                             86
                                                                                                                                                                                                                                                                                 79 WMRNGSHCYYFSMEKRDWNSS------LKFCA----DKGSHLLTFP-DNQGV---- 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            70 SQCSR-CPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLL 111
                                                                                                             SENWARQYLGQQFYLGVYSPANSWRDE-----YPIPSNALL--CG 183
                                                                                                                                                                                                                          WHVDGHHFYVVGMDGGQWSTSSRSNYNLRDTISRCTVQVYPKSWTAVYMPLDNVGMWNVR 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Evans, Cheryl
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Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published_Applications_AA_New:*

1: /cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*

8: /cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:*
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Copyright (c) 1993 - 2006 Compugen Ltd.
                   US-10-055-877-206
US-10-055-877-205
US-10-055-877-209
US-10-055-877-209
US-10-0467-657-269
US-10-131-826A-240
US-10-945-853-2
US-11-137-465-60
US-10-131-826A-232
US-10-131-826A-232
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US-10-147-492-10
US-10-93-626-3000
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Sequence 206, App Sequence 207, App Sequence 207, App Sequence 240, App Sequence 240, App Sequence 240, App Sequence 240, App Sequence 117, App Sequence 276, App Sequence 276, App Sequence 30, App Sequence 30, App Sequence 30, App Sequence 30, App Sequence 30, App Sequence 12, App Sequence 12, App Sequence 13, App Sequence 13, App Sequence 13, App Sequence 13, App Sequence 139, App Sequence 139, App Sequence 139, App Sequence 10, App Sequence 20,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
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US-10-055-877-206
; Sequence 206, Application US/100
; Publication No. US20050288241A1
; GENERAL INFORMATION:
; APPLICANT: DeCristofaro, Marc
; APPLICANT: Padigaru, Muraliaha
; APPLICANT: Miller, Charles
; APPLICANT: Miller, Charles
  APPLICANT: Casman, Stacie
APPLICANT: Boldog, Ference
FILE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
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Baumgartner, Jason
Shimkets, Richard
Gusev, Vladimir
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Spytek, Kimberly
Ratelli, Luca
Kekuda, Ramesh
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Miller, Charles
Tchernev, Velizar
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Taupier Jr., Raymond
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Mezes, Peter
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Zerhusen, Bryan
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Gerlach, Valerie
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Burgess, Cahterine
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US-11-036-797-37

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US-11-147-492-18

US-11-147-492-18

US-11-147-492-18

US-11-147-492-19

US-11-147-492-19

US-10-980-388-1101

US-11-147-492-19

US-10-884-730-322

US-10-884-730-322

US-10-884-730-322

US-10-884-730-322

US-10-884-730-322

US-10-467-657-3184

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US-10-467-657-7132
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Sequence 613, Appl
Sequence 14, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 18, Appl
Sequence 10, Appl
Sequence 10, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 294, Appl
Sequence 322, Appl
Sequence 221, Appl
Sequence 221, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
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Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 3184, Appl
Sequence 3184, Appl
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Minimum DB seq length: 188 Maximum DB seq length: 189

Post-processing: Minimum Match Maximum Match

Listing first 45 summaries

100%

Scoring table: Sequence: Title: Perfect score:

BLOSUM62 Gapop 10.0 , Gapext 0.5

3184, Ap 4400, Ap 7132, Ap

US-09-811-367B-5 1036

Run on: OM protein -

protein search, using sw model

Regult No.

Score

Match

Length

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Query

838 545.5 525.5

100.0 80.9 52.7

44.5 42.5 41.4 41.4 40.4

4444

34.5 34

38 37.5 37 35

39.5 39.5 39.3 39

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Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 512
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 206
SEQ ID NO 206
TENGTH: 188
TYPE: PRT
ORGANISM: Rattus norvegicus
US-10-055-877-206
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US-10-055-877-205
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
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OR FILING DATE: 2001-01-30
OR APPLICATION NUMBER: 60/272,870
OR FILING DATE: 2001-03-02
OR APPLICATION NUMBER: 60/275,990
OR FILING DATE: 2001-03-14
OR APPLICATION NUMBER: 60/275,927
OR FILING DATE: 2001-03-14
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Mezes, Peter
Patturajan, Meera
Patturajan, Cahterine
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Miller, Charles
Mirrney, Velizar
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                                                                                  Baumgartner, Jason
Shimkets, Richard
Gusev, Vladimir
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Casman,
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Taupier Jr., Raymond
Pena, Carol
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Spytek, Kimberly
                        Shenoy, Suresh
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Kekuda, Ramesh
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usen, Bryan
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Stacie
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US-10-055-877-205
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APPLICANT:
APPLICANT:
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SEQ ID NO 205
                                                                                                           APPLICANT:
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PRIOR APPLICATION NUMBER: 60/263,351
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/272,870
PRIOR FILING DATE: 2001-03-02
PRIOR APPLICATION NUMBER: 60/275,990
PRIOR APPLICATION NUMBER: 60/275,990
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PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/263,598
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TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: 60/275,927
PRIOR FILING DATE: 2001-03-14
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PRIOR FILING DATE: 2001-01-24
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
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TYPE: PRT
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PRIOR FILING DATE: 2001-01-25
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Miller, Charles
Mirrney, Velizar
Gerlach, Valerie
Spytek, Kimberly
Ratelli, Luca
Kekuda, Ramesh
Guo, Xiaojia
Zerhusen, Bryan
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                                                                                                         Anderson, David
Ballinger, Robert
Gerlach, Valerie
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APPLICANT:

Andrew, David Mezes, Peter

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US-10-055-877-207
                  RESULT 4
US-10-055-877-209
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SEQ ID NO 207
LENGTH: 189
TYPE: PRT
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Best Local Similarity
Matches 103; Conserv
Sequence 209, Application US/10055877
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PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR APPLICATION NUMBER: 60/262,892
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PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR FILING DATE: 2001-01-24
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR FILING DATE: 2001-01-25
PRIOR FILING DATE: 2001-01-25
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CURRENT FILING DATE: 2002-01-22
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TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
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FILING DATE: 2001-01-26
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APPLICATION NUMBER: 60/275,927
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                                                                                                                                           180 QWICEKV 186
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                                                                                                     181 HWVCKKV 187
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Taupier Jr., Raymond
Pena, Carol
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Shimkets, Richard
Gusev, Vladimir
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US-10-055-877-209
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PRIOR FILING DATE: 2001-01-23
PRIOR FILING DATE: 2001-01-24
PRIOR FILING DATE: 2001-01-24
PRIOR FILING DATE: 2001-01-24
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR APPLICATION NUMBER: 60/264,139
PRIOR PILING DATE: 2001-01-25
PRIOR PILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,478
PRIOR APPLICATION NUMBER: 60/263,351
PRIOR APPLICATION NUMBER: 60/263,351
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-03-02
PRIOR PILING DATE: 2001-03-02
PRIOR PILING DATE: 2001-03-03
PRIOR APPLICATION NUMBER: 60/275,990
PRIOR FILING DATE: 2001-03-04
PRIOR FILING DATE: 2001-03-04
PRIOR FILING DATE: 2001-03-04
PRIOR FILING DATE: 2001-03-04
PRIOR FILING DATE: 2001-03-04
PRIOR FILING DATE: 2001-03-07
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Best Local S
Matches 100
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SEQ ID NO 209
LENGTH: 189
TYPE: PRT
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APPLICANT: DeCristo
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CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
CURRENT FILING DATE: 60/262,892
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-01-19
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TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
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                                                                                                                       n 50.7%; Score 525.5; DB 6; Similarity 53.5%; Pred. No. 1.3e-49; D0; Conservative 29; Mismatches 57;
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CCGSKGFMCSQCSRCPNLWMRNGSHCYYFSMEKRDWNSSLKFCADKGSHLLTFPDNQGVN 120
                                                                              MADNSIYSTLELPAAPRVQDDSRWKVKAVLHRPCVSYLVMVALGLLTVILMSLLLYQRTL 60
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                                         WTDSVIYSMLELPTATQAQNDYGPQQKSSSSKPSCSCLVAITLGLLTAVLLSVLLYQWIL
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Miller, Charles
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Spytek, Kimberly
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Taupier Jr., Raymond
Pena, Carol
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Gusev, Vladimir
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Burgess, Cahterine
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Kekuda, Ramesh
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Wolenc, Adam
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; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-2690
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US-10-467-657-246
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PRIOR TILING DATE: 2001-02-12
NUMBER OF SEQ ID NOS: 9218
SOFTWARE: SegWin99, version 1.04
SEQ ID NO 246
                                                                                                                                                                                                                                                                                                                                   Sequence 2690, Application US/10467657 Publication No. US20050260581A1 GENERAL INFORMATION:
                                                                   CURRENT APPLICATION NUMBER: US/10/467,657
CURRENT FILING DATE: 2003-08-11
PRIOR APPLICATION NUMBER: GB-0103424.8
PRIOR FILING DATE: 2001-02-12
NUMBER OF SEQ ID NOS: 9218
SOFTWARE: SegWin99, version 1.04
SEQ ID NO 2690
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Best Local Similarity
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APPLICANT: FONTANA MARIA Rita
APPLICANT: FIZZA MARIAGRAZIA
APPLICANT: MASIGNANI Vega
APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
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APPLICANT: MASIGNANI Vega
APPLICANT: MONACI Elisabetta
TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
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CURRENT FILING DATE: 2003-08-11
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APPLICANT: FONTANA Maria Rita
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ORGANISM: Neisseria gonorrhoeae
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -IGIH 150
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Pred. No.
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5.9e+02;
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US-10-131-826A-240
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                                                                                            SEQ ID NO 240
LENGTH: 189
TYPE: PRT
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 240, Application US/10131826A Publication No. US20050245730A1 GENERAL INFORMATION:
 Query Match
Best Local Similarity
Matches 37; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P33030R1C128
CURRENT APPLICATION NUMBER: US/10/131,826A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                        Remaining Prior Application NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/059588 PRIOR FILING DATE: 1997-09-19
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PRIOR FILING DATE: 1997-09-17
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PRIOR FILING DATE: 1997-09-17
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PRIOR APPLICATION NUMBER: 60/056974
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                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/059263
                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/059352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Godowski, Paul J. Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beresini, Maureen
4.3%;
ilarity 20.1%;
Conservative 2
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                                                                                                                                                                                                                                                                                                                                                                                    60/059122
                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/059115
                                                                                                                                                                                            data removed - See File Wrapper or PALM
     25;
 Score 44.5; DB 6;
Pred. No. 6.6e+02;
5; Mismatches 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 45; DB 6;
Pred. No. 5.9e+02;
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                                       Length 189;
     Indels 75;
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     Gaps
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RESULT 8
US-10-945-853-2
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                                                                                                                                  RESULT 9
US-11-064-774A-117
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                                                                        Sequence 117, Application US/11064774A Publication No. US20050267024A1 GENERAL INFORMATION:
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SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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APPLICANT: Rayhorn, Paul
APPLICANT: Schiffer, Susan Gail
APPLICANT: Williams, Kevin
TITLE OF INVENTION: Cripto-Specific Antibodies
FILE REFERENCE: BGNA117CPPCON
CURRENT APPLICATION NUMBER: US/10/945,853
CURRENT FILING DATE: 2004-09-20
CURRENT FILING DATE: 2004-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Biogen, Inc.
APPLICANT: Sanicola Nadel, Michele
APPLICANT: Adkins, Heather
APPLICANT: """ STAVEN Donald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/US02/11950
PRIOR FILING DATE: 2002-04-17
PRIOR APPLICATION NUMBER: 60/286,782
PRIOR FILING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: 60/293,020
APPLICANT: Alitalo et al.
TITLE OF INVENTION: MATERIALS AND METHODS INVOLVING HYBRID VASCULAR ENDOTHELIAL GROWT
TITLE OF INVENTION: FACTOR DNAS AND PROTEINS
FILE REFERENCE: 28967/35977B2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/301,091
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PRIOR FILING DATE: 2002-10-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 188
                                                                                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                         78 LWMRNGSH 85
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                                                                                                                                                                                                                                                                                                                                                                                              4.1%;
27.9%;
                                                                                                                                                                                                                                                                                                                                                                           Score 42.5; DB 6;
Pred. No. 1.1e+03;
8; Mismatches 34;
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                                                                                                                                                                                                                                                                                                  -LPMGIQHSKELNRTCCLNGGTCMLESFCACPPS
                                                                                                                                                                                                                                                                                                                                                                                                                     Length 188;
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CURRENT FILING DATE: 2005-02-24
PRIOR APPLICATION NUMBER: 09/795,006
PRIOR FILING DATE: 2001-02-26
PRIOR APPLICATION NUMBER: US 60/205,331
PRIOR APPLICATION NUMBER: US 60/205,331
PRIOR FILING DATE: 2000-05-18
PRIOR PRIOR DATE: 2000-05-25
PRIOR FILING DATE: 2000-02-25
PRIOR FILING DATE: 2000-02-25
PRIOR FILING DATE: 2000-02-25
PRIOR PILING DATE: 2000-03-25
PRIOR PILING DATE: 2000-03-25
RESULT 11
US-10-131-826A-232
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PRIOR APPLICATION NUMBER: US/10/239,663
PRIOR APPLICATION NUMBER: PCT/US01/09226
PRIOR APPLICATION NUMBER: PCT/US01/09226
PRIOR FILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 60/192,158
PRIOR FILING DATE: 2000-03-24
PRIOR FILING DATE: 2000-03-24
PRIOR APPLICATION NUMBER: 60/192,668
PRIOR APPLICATION NUMBER: 60/192,668
PRIOR APPLICATION NUMBER: 60/200,166
PRIOR APPLICATION NUMBER: 60/200,166
PRIOR APPLICATION NUMBER: 60/200,166
PRIOR APPLICATION NUMBER: 60/200,166
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 2000-03-27
                                                                                                                                                                                                                                                                                            SEQ ID NO 60
LENGTH: 189
TYPE: PRT
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Best Local Similarity 31.6
6; Conservative
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Publication No. US20050255558A1
                                                                                                                                                                     Matches
                                                                                                                                                                                    Query Match
Best Local S
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APPLICANT: Murdoch, Paul
                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 66
SOFTWARE: FastSEQ for Windows Version 3.0
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CURRENT APPLICATION NUMBER: US/11/137,465
CURRENT FILING DATE: 2005-05-25
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TITLE OF INVENTION: NOVEL COMPOUNDS
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                                                                                 168 DDEHKMSVHYVNTSLVEKCG 187
                                                                                                                       144 EDGPALSISIISNSVVQKCG 163
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                                                                                                                                                                     Similarity 7; Conserv
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Rizvi, Safia, K.
smith, Randall, F.
Xiang, Zhaoying
                                                                                                                                                                   Conservative
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Pred. No. 1.6e+03;
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Pred. No.
                                                                                                                                                                         Mismatches
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Sequence 232, Application US/10131826A Publication No. US20050245730A1 GENERAL INFORMATION: APPLICANT: Baker, Kevin P.

APPLICANT:

Beresini, Maureen

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RESULT 12
US-10-793-626-2976
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                               Sequence 2976, Application US/10793626
Publication No. US20050255478A1
GENERAL INFORMATION:
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LENGTH: 189
                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
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PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1997-09-19
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                                                                                                                                                                                                                                                                                                                                                                                              Local
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APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
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FILING DATE: 1997-09-17
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                                                                                                                                                           GEPSILPDSPVGQLHASILGISQLLQPEGHHWETQQIPSIS 151
                                                                                                                                                                                                                                EGDEETTNDVPHIQCGDGCDPQGLRDNSQFCLQR-----IHQGLIFYEKLLGSDIFT 110
                                                                                                                                                                                                                                                                                                                                        LGLLTVILMSLLLYQ---RTLCCGSK--GFMCSQCSR--CPNLWMRNGSHCYYFSMEKRD 95
                                                                                                                                                                                                                                                                                                       LGSRAVMLLLLLPWTAQGRAVPGGSSPAWTQCQQLSQKLCTLAW----SAHPLVGHMDLRE
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Wood, William
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                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                   -----WNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGEDFY- 131
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                                                                                                                                                                                                                                                                                                                                                                         Score 40; DB 6;
Pred. No. 2e+03;
1; Mismatches
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US-10-945-853-1
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US-10-793-626-3000
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CURRENT FILING DATE: 2004-03-04
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOFTWARE: PALENTIN Ver. 2.1
SEQ ID NO 3000
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CURRENT APPLICATION NUMBER: US/10/793,626
CURRENT FILING DATE: 2004-03-04
PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
SOFTWARE: PAtentIn Ver. 2.1
SEQ ID NO 2976
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Publication No. US20050255478A1
GENERAL INFORMATION:
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Best Local (
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Best Local :
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                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT: Schiffer, Susan Gail
APPLICANT: Williams, Kevin
TITLE OF INVENTION: Cripto-Specific Antibodies
FILE REFERENCE: BRONALLTCPPCCN
CURRENT APPLICATION NUMBER: US/10/945,853
CURRENT FILING DATE: 2004-09-20
                                                                                                                                                      APPLICANT: Biogen, Inc.
APPLICANT: Sanicola-Nadel, Michele
APPLICANT: Adkins, Heather
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
FILE REFERENCE: PU3480US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 189
TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Description of Artificial Sequence: synthetic OTHER INFORMATION: amino acid sequence
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                                                                                                                                                                                                                                                                                                                                                                                         115 DNQGVNLFQEYVGEDFYWIGLRDIDG----WRWEDG 146
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                                                                                                               Miklasz, Steven Donald
Rayhorn, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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Pred. No. 2e+03;
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Pred. No.
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PRIOR APPLICATION NUMBER: PCT/US02/3146
PRIOR FILING DATE: 2002-10-01
PRIOR APPLICATION NUMBER: PCT/US02/1195
PRIOR APPLICATION NUMBER: PCT/US02/1195
PRIOR FILING DATE: 2002-04-17
PRIOR APPLICATION NUMBER: 60/286,782
PRIOR APPLICATION NUMBER: 60/293,020
PRIOR APPLICATION NUMBER: 60/293,020
PRIOR PILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/301,091
PRIOR PILING DATE: 2001-05-26
PRIOR PILING DATE: 2002-03-22
NUMBER OF SEQ ID NOS: 9
SEQ ID NO 1
LENGTH: 188
TYPE: PRT
CORGANISM: Homo mapiens
                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/11/147,492
CURRENT FILING DATE: 2005-06-07
PRIOR APPLICATION NUMBER: US 60/579,024
PRIOR FILING DATE: 2004-06-04
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.2
SEQ ID NO 30
LENGTH: 189
TYPE: PAT
OTAGANISM: homo sapiens
US-11-147-492-30
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US-11-147-492-30
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Publication No. US20050276785A1
GENERAL INFORMATION:
APPLICANT: Kagp, Joachim-Freidrich
APPLICANT: Kuehl, Uwe
APPLICANT: Groetzbach, Georg
APPLICANT: Schultheiss, Heinz-Peter
APPLICANT: Sowade, Olaf
APPLICANT: Stuerzebecher, Claus-Steffen
TITLE OF INVENTION: Treatment of Cardiomyopathy and Endothelial Dysfunction
FILE REFERENCE: 53223
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FILING DATE: 2002-10-01
APPLICATION NUMBER: PCT/US02/11950
FILING DATE: 2002-04-17
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                                              154 LSNSVVQKCGTIHRC 168
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                                                                                           66 FDGNQ-----FOKAQAISVLHEMIQQTFNLFSTKDSSA-TWEQS---LLEK 107
                                                                                                                                       94 RDWNSSLKFCADKGSHLLTFPDNQGVNLFQEYVGEDFYWIGLRDIDGWRWEDGPALSLSI 153
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                                                                                                                                                                                                                                        47 TVILMSLLLYQRTLC------CGSKG--FMCSQCSRCPNLWMRNGSHCYYFSMEK 93
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FSTELNOQLNDMEAC 122
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